

Home Care and Rehabilitation

The provision of health services on a comprehensive basis rests on four major factors: personnel, capital, scientific and technological know-how resulting from research, and organization. We have dealt with health personnel and facilities in Chapters 7, 8, 13, and 14 of this volume. Research and matters of organization are dealt with in Volume II. There are, however, two areas which we would like to single out for special consideration because they cut across the four factors mentioned and are of the utmost importance for the co-ordination of the recommended comprehensive Health Services Programme. These two items are: organized home care and rehabilitation.

The provision of adequate home care services has become a matter of great importance for the twofold reasons of better care for the sick and, at the same time, more economic services where they can substitute for or supplement hospital care. Concerning the respective economics of care in the home or the hospital, we have strong indications that the operation of an organized home care plan, providing a good standard of service, is considerably less expensive than the corresponding care in hospital for the certain types of patients and certain illnesses or stages of illness for which home care is suitable.

Rehabilitation, the second subject to be reviewed in this chapter, is a problem on an entirely different plane from that of home care. While the latter refers to a specific type of organization, rehabilitation is a principle underlying a varying range of services. Its implementation, however, raises major administrative and organizational problems. Rehabilitation in physical as well as mental illness requires the earliest possible return of hospital patients to the community. Thus, there is a close link between the implementation of home care plans, and an increasing emphasis on the principles of rehabilitation.

ORGANIZED HOME CARE

In Chapters 3 and 6 we refer to the changes that have taken place in people's attitude towards the hospital; not only its growing acceptance but also the increasing demand for its services when diagnosis and care of any consequence are involved. We also observe that at the same time the

home has become a less suitable place for accommodating the sick as urbanization and the type of modern housing have altered living conditions and broken up the pool of relatives and neighbours from which attendants for the sick could usually be drawn.

Thus there was a tendency to look upon the hospital as the natural place to go when sick, until some second thoughts developed. There can be no doubt that with the rapid progress in medical science and technology the hospital is the only place where adequate and up-to-date diagnostic and treatment facilities for a great number of conditions are available. The same applies to the medical restoration phase of the rehabilitation process. But more and more emphasis is being placed now on the need for judiciously examining whether an actual need for hospitalization exists in a particular case.

In many cases need may be exaggerated, leading to over-utilization of hospital facilities and contributing to shortages and pressure for additional hospital construction. Not enough consideration has been given to alternatives, particularly the increased use of home care services and out-patient facilities.

Why is this so? The answer is provided by the structure of the modern health services complex.¹ The hospital has become the repository of much of the modern diagnostic treatment and rehabilitation facilities and equipment. Hence its attraction for the physician and patient alike, although an increasing range of specific services such as visiting nursing, physiotherapy, medical social work, and others are available now in the community outside the hospital. But whereas all the necessary ancillary services are brought to bear on the case by the institution once a person is admitted as an in-patient to the hospital, there has been no corresponding organization before the advent of organized home care plans to co-ordinate similar services outside the hospital.

Thus, one of the prerequisites for restoring home care to its proper place is the development and organization of the necessary community services outside the hospital, so that the physician can refer patients requiring a variety of services to the home care plan just as he refers them to the hospital when they need hospital care. We must realize that home care plans of themselves will not necessarily mean that they will be fully utilized. They must have the confidence of patients and physicians. Too often physicians are indifferent to such plans and do not support them. After reviewing home care plans in Canada and the United States, Dr. Genesove concludes that "the biggest single failing in each programme was the failure to enlist the support, develop the interest, and utilize the skill of the average neigh-

¹ See Chapters 7 and 8.

bourhood doctor".¹ One important factor in promoting the acceptance of home care by the physician, the patient and his family is the assurance that the patient can be readily admitted or readmitted to a hospital, should the need arise.

As long as the cost of hospitalization is covered by the insurance plan, but the patient is expected to pay for services such as home care received outside the hospital, there is an incentive to use the hospital even where adequate care can be provided outside. This anomaly in our present system of health services will be eliminated by implementation of our recommendations regarding the organization of home care programmes and their financing, as well as by the recommended full coverage of out-patient services under the Hospital Insurance and Diagnostic Services scheme.²

Sufficient experience has been gained in Canada over more than fifteen years with the operation of home care plans in a great variety of settings,³ to warrant now the general implementation of such plans. The National Health Grants Programme has encouraged the development of home care plans but, by its very nature, favoured diversity rather than co-ordinated development. This was justified and necessary to evaluate the operation of various types of plans. We are convinced that the stage has now been reached where, on the one hand, it has become imperative to supplement the services provided under the Hospital Insurance and Diagnostic Services Act, and where, on the other hand, the implementation of organized home care plans has become feasible. Great care will have to be taken in the planning and administration of home care plans that they not be looked upon merely as less costly substitutes for hospitalization. There must be close co-ordination between the home care plan and the hospital, the choice at a particular stage being determined by the needs of the patient.

The haphazard development of home care plans has meant, in many cases, certain limitations on the type of patients admitted to the plan, beyond the purely medical and social criteria which establish whether a particular patient could benefit from home care services. Among the extraneous criteria is the capacity of the plan in terms of finances and personnel. But these apply generally without selecting certain types of patients except perhaps according to the severity or urgency of the case. We also find that some plans are limited, for instance, to patients discharged from a certain hospital, to certain conditions (such as psychiatric), or to indigents. This is natural

¹ The Moose Jaw Community Home Care Program, Moose Jaw, Saskatchewan, *First Annual Report*, April 1st, 1962-March 31st, 1963, p. 6. The Moose Jaw Community Home Care Programme, however, represents a notable exception in this regard because the programme was established at the initiative of the Moose Jaw and District Medical Society.

² See Chapter 2, Recommendations 105-107, 120 and 121.

³ See Kohn, R., *Emerging Patterns in Health Care*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

as long as the establishment of home care plans has to wait for local initiative often taken to meet a specific problem. The selectiveness characterizing some of the existing plans will disappear, however, when plans become established as an essential community service.

Services Provided by Home Care

As with other health services, the physician remains the hub for the services provided under a home care programme. He directs all health services brought to bear on the case and his judgment is an important factor in the employment of other community services. The medical criteria he sets for the admission and discharge of home care patients are supplemented by the social conditions of the patient as determined by the medical social worker or the nurse.

Professional nursing is another essential service. The services of the full-time private duty nurse in the home are infrequent because of the cost, the scarcity of nurses, and the fact that cases requiring this type of nursing usually also require active treatment in the hospital. Thus, most cases requiring continuous nursing supervision will be cared for in an institution, leaving the bulk of nursing under a home care programme to the visiting nurse. Home nursing and visiting nursing mean that the nurse goes to the home only long enough to discharge a certain function such as applying a treatment or giving health instruction to the patient or members of his household regarding the management of the case. Where other community services are not developed, the visiting nurse often performs some of the tasks of the social worker, physiotherapist, and if necessary of the homemaker. Even before the advent of formal home care programmes she called in other community services where needed and available. Because of this background and experience, nurses are often found as the administrators or co-ordinators of home care programmes.¹

¹ The institution of visiting nursing deserves much more attention than it has been receiving in the past. Largely perhaps because the service was provided generally by voluntary organizations, it has always been looked upon as something akin to charity rather than an essential part of health services. Suddenly, with the advent of home care programmes, we discovered that we really had its most essential component available all along if only we had used it adequately. Here also is a service which, besides the care for the sick, always emphasized the positive and preventive aspects of health care, particularly in regard to prenatal and postnatal maternity care and health education. The nurses have kept abreast with modern developments in these fields and also with the new approach towards rehabilitation, both physical and psychiatric. Thus visiting nursing seems to emerge as a discipline of its own distinct from hospital, traditional public health, or industrial nursing. By public health nursing we mean services provided by public health departments which usually do not include bedside nursing. Most visiting nurses now have public health training. What sets them apart is not so much their training as their function and responsibility. Much like public health nurses in remote areas, the visiting nurse combines the functions of the hospital nurse and the public health nurse but has to work more independently and thus requires more initiative and resourcefulness, such as found in voluntary organizations like the Victorian Order of Nurses for Canada, established in 1897, the Saint Elizabeth Visiting Nurses Association, founded in 1908, and the Société des Infirmières Visiteuses formed in 1937. Public health nurses now do provide home nursing in many areas of British Columbia and, to a lesser extent, in other provinces.

The physician and a visiting nursing service form a home care plan, with the latter service providing the organizational nucleus. As indicated already, the nurse sometimes also takes on the role of the social worker in assessing the suitability of the household for home care, and she also establishes contact with other community services required in the case. This contact may be made on a more or less personal basis without any formal liaison arrangements. This, together with the fact that no new organization is required if only the physician and the nursing service are involved, provides the essentials of a home care plan though not of the formal nature of what has become recognized as an organized home care programme.

A formal home care programme must have an organization, either voluntary or public, whose responsibility it is to co-ordinate the work of the several agencies providing services under the plan.¹ These should include all the professional and technical assistance available at the hospital (except those specifically limited to active treatment which can be given only to hospital in-patients) plus any services required to improve where necessary the patient's home conditions so that the health services can be provided in the home in a satisfactory setting. In other words, home care must be able to provide both the health services proper and such services as homemaker, meals-on-wheels, social welfare and friendly visitors needed to provide the adequate environment for the effective functioning of health services.² Obviously the range of services available will largely influence the choice of patients that can be covered by a particular home care programme. The cost of the programme will be affected by the type of services available and the extent to which they are used. The kind of services a home care plan has to provide will also depend on the extent to which diagnostic and treatment services are available in a hospital out-patient department or rehabilitation centre, and can be used by patients going there or taken there by ambulance or taxi. Depending on the relationship between the programme and the hospital, X-ray or laboratory procedure may be considered part of the home care programme. Table 15-1 shows the services provided by selected home care plans in Canada.³ While the range varies—not only from plan to plan but also under the same plan over a period of time—the following services are required components: nursing as a basic service, social case work, homemaking or housekeeping, physiotherapy, occupational therapy, and transportation (ambulance or taxi). We find

¹ See also *Report of the Conference on Organized Home Care, Chronic Disease Program, U.S. Public Health Service*, held in Roanoke, Va., June 9-13, 1958, p. 7; and Commission on Chronic Illness, *Care of the Long-Term Patient*, Chronic Illness in the United States, Volume II, Harvard University Press, Cambridge, Mass., 1956, p. 587.

² Dale, B. T., and Mumby, D. M., *A Study of Home Care Needs in Wellington County*, The Wellington County Board of Health, Fergus, Ontario, 1961, p. 5.

³ The comparability of the data is affected by the aforementioned varying approach to hospital X-ray and laboratory services. Also, some plans specify certain services while others may lump them together under a general heading such as "social services" (e.g., service clubs sometimes provide appliances, drugs, or other services).

TABLE 15-1 SERVICES PROVIDED BY SELECTED HOME CARE PROGRAMMES IN CANADA
(in addition to physicians' services)

Type of Service†	Moose Jaw Community Home Care Programme	Pilot Home Care Programme, Toronto	Home Care Medical Programme, Winnipeg General Hospital	Home Care Service, Greater Victoria, Metro- politan Board of Health	Home Care Section, Herbert Reddy Memorial Hospital	Service de soins à domicile, hôpital Ste. Jeanne D'Arc, Montreal	Projet d'un service de soins organisés à domicile pour les villes de Hull et de Pointe- Gatineau	Home Care Rehabili- tation Project, Saskatoon	Conva- lescent Nursing Service, Vernon, B.C.
Nursing.....	x	x	x	x	x	x	x	x	x
Homemakers.....	x	x	x	x	x	x	x	x	x
Physiotherapy.....	x	x	x	x	x	x	x	x	x
Occupational Therapy.....	x	x	x	x	x	x	x	x	x
Loan Equipment.....	x	x	x	x	x	x	x	x	x
Drugs.....	x	x	x	x	x	x	x	x	x
Other Medical Supplies.....	x	x	x	x	x	x	x	x	x
Social Case Work.....	x	x	x	x	x	x	x	x	x
X-ray.....	x	x	x	x	x	x	x	x	x
Laboratory Procedures.....	x	x	x	x	x	x	x	x	x
Ambulance.....	x	x	x	x	x	x	x	x	x
Taxi.....	x	x	x	x	x	x	x	x	x
Orderly.....	x	x	x	x	x	x	x	x	x
Meals-on-wheels.....	x	x	x	x	x	x	x	x	x
Speech Therapy.....	x	x	x	x	x	x	x	x	x
Nutritionist.....	x	x	x	x	x	x	x	x	x
Night Sitter.....	x	x	x	x	x	x	x	x	x
Appliances.....	x	x	x	x	x	x	x	x	x
Baby Sitter.....	x	x	x	x	x	x	x	x	x
Dental.....	x	x	x	x	x	x	x	x	x

*Planned for the future.

†The services provided by specific plans are subject to change. They are generally expanded as availability and resources permit.

SOURCE: Kohn, R., *Emerging Patterns in Health Care*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

frequently that new services are incorporated in the programme as the plan grows. It is important that home care patients be readily admitted or readmitted to the hospital when the need arises.

Patients and Their Conditions

What kind of patients are cared for by a home care programme? They are principally the aged and chronically ill. The age composition of patients is fairly uniform among plans where statistics are available.¹ About 70 per cent of the patients are in the age group 60 and over. The remainder comes almost entirely from the age groups between 20 and 60 years, with some plans having from about 3 per cent to 7 per cent of their patients in the age groups under 20.

In contrast, among patients discharged from general hospitals² the age group 60 years and over accounts for only about 15 per cent of the separations, the middle age group (20 to 59 years) for about 46 per cent, and the under 20 group for about 39 per cent.³ This reflects the emphasis in home care plans on the care of the aged, the main age group as far as chronic disease is concerned. The proportion of the over 60 in formal home care plans also exceeds that among patients receiving the more generalized services of the Victorian Order of Nurses.⁴

TABLE 15-2 PERCENTAGE AGE DISTRIBUTION OF HOME CARE PATIENTS

Age	Selected Home Care Plans	General Hospital Separations		Visiting Nursing Services		General Population 1961
		Cases	Days	Cases	Visits	
Under 20.....	5	39	24	19	5	42
20-59.....	25	46	40	27	20	47
60 and over.....	70	15	36	54	75	11
TOTAL.....	100	100	100	100	100	100

SOURCE: Kohn, R., *Emerging Patterns in Health Care*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

¹ British Columbia, Winnipeg General Hospital, Toronto, and Moose Jaw.

² Data for 8 provinces relate to 1960 and were made available by the Dominion Bureau of Statistics.

³ Table 15-2.

⁴ Including the medical and surgical but not the maternity cases.

Little information is available on the distribution of the workload (number of visits or patient-days) by age groups but the British Columbia and Victorian Order data agree in showing that the average number of nursing visits increases with the patient's age:

TABLE 15-3 AVERAGE NUMBER OF NURSING VISITS PER PATIENT

B.C. Nursing Care Programme		Victorian Order	
Age Group	Per Cent of Visits	Age Group	Per Cent of Visits
0-19.....	9.6	Under 15.....	4.2
20-59.....	14.6	15-44.....	10.0
60 and over.....	16.2	45-64.....	19.3
		65 and over....	26.4

SOURCE: Kohn, R., *Emerging Patterns in Health Care*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

The conditions treated vary from plan to plan according to its scope and design. The emphasis is on chronic conditions, with cardiovascular patients accounting for about 30 to 40 per cent of the patient load, and cancer for about 10 to 20 per cent. Some plans, however, are limited to certain conditions or emphasize them (e.g., psychiatric disorders or diseases of the nervous system) while others generally will not accept such cases because of the lack of resources or because of other facilities available for the care of these conditions. Thus, plans are selective concerning the type of patients and conditions they accept though sometimes the restrictions imposed at the inception of a plan are relaxed once the programme has been in operation for some time. In stating their objectives, plans often refer in rather general terms to the problems of the aged and chronically ill.

Costs

In regard to the cost of home care and a comparison with the cost of corresponding hospitalization, it is difficult to draw more than general conclusions in the light of available evidence. The main difficulty lies in the lack of uniformity among plans as to the services provided, patients accepted, administrative arrangements, and auspices. This is paralleled by a similar variation in accounting practices. Part of the problem is the inclusion or exclusion of administrative costs, costs of drugs or the services of other agencies (e.g., out-patient departments) used by a home care plan.

An illustration of the per diem cost of four selected home care plans is given in Table 15-4 which also shows the proportion of the administrative (overhead) component.¹

TABLE 15-4 PER DIEM COST OF FOUR SELECTED HOME CARE PLANS

Cost Component	Plan "A" (95 Patients)		Plan "B" (77 Patients)		Plan "C" (57 Patients)		Plan "D" (168 Patients)	
	\$	Per Cent	\$	Per Cent	\$	Per Cent	\$	Per Cent
Service.....	2.57	53	4.01*	54	1.99	55	1.14**	71
Administration.....	2.24*	47	3.43*	46	1.66	45	0.45	29
TOTAL PER DIEM.....	4.81	100	7.44	100	3.65	100	1.59	100

*Provisional figures.

**Excluding the cost of physicians' house calls (\$0.07).

SOURCE: Kohn, R., *Emerging Patterns in Health Care*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

The comparatively high proportion of administrative costs may be partly explained by the still largely experimental stage of the plans and the fact that they may not have reached their optimum capacity. The Toronto programme forecasts a reduction in the share of the administrative costs once it "has got down to business-like proportion".² The report goes on to say:

"One may have to explain why the administrative component at its best constitutes so high a percentage of total cost, greater than that found in most enterprise. This should present no difficulty as one makes it clear that in a home care program the administrative individual carries duties of promotion and interpretation, and of actual personal contact, far in excess of those of the basic executive function and that this feature will continue more or less for all time to be a determinant of this element of cost. Administration, in other words, is and will be more than overhead as commonly conceived".

Similar difficulties, as in the inter-plan comparison of per diem costs, arise in any attempt to compare the per diem cost of home care with that of hospital care. We have seen that even in a hospital-based home care plan

¹Plan "A": City of Toronto, Department of Public Health, Pilot Home Care Program (Original Program).

Plan "B": Same (Expansion Program).

Plan "C": The Moose Jaw Community Home Care Program.

Plan "D": The Home-Care Medical Program of the Winnipeg General Hospital.

²City of Toronto, Department of Public Health, *Fourth Annual Report, Pilot Home Care Program*, April 1, 1961-March 31, 1962, p. 21.

not all days are considered to be alternatives for hospital care. The per diem cost, on the other hand, is calculated for all days of care. It is possible that the home care per diem cost would be higher, were it calculated separately for the days actually substituting for hospital stay. Some general idea of the size of the per diem cost under home care on the one hand, and hospital care on the other, may be gained by a comparison of the range of these costs. The cost under the four selected home care plans ranges from \$1.59 to \$7.44 per patient-day. The corresponding cost per hospital day in 1960 ranges from \$4.94 in mental hospitals to \$20.61 in general hospitals.¹

The new approach to psychiatric care² emphasizes the advantages of treating patients in the community and in their familiar environment rather than isolating them in institutions. Rehabilitation, in physical or mental illness, also stresses the benefits of the earliest possible return of patients to their own social setting or one resembling it as closely as possible. All these trends mean new demands on a home care organization which puts at the physician's disposal the range of services required by patients who do not need special services available only in the hospital, including full-time nursing supervision.

The new emphasis on rehabilitation, in physical as well as mental illness, has other implications regarding the role and organization of the various health services. These will be briefly reviewed below.

On the whole we conclude that in most cases home care will be cheaper than hospital care where 38.3 per cent of the operating cost in general and allied special hospitals is accounted for by general services³ other than those provided by the service departments of the hospital.⁴ There is the further saving in capital cost due to the reduced expenditure for hospital construction, if fewer hospital beds are needed. But this reasoning is based on the viewpoint of the agency financing either home care or hospital service, not that of the patient or the community. Comparisons of

¹Costs per hospital day in 1960 were as follows:

all hospitals.....	\$12.99
general and allied hospitals.....	19.47
general.....	\$20.61
chronic and convalescent.....	8.63
other special.....	19.23
mental hospitals.....	4.94
tuberculosis hospitals.....	10.41

SOURCE: Dominion Bureau of Statistics, *Hospital Statistics 1960*, Volume VI, Hospital Expenditures, Ottawa: Queen's Printer, 1963.

²See Chapters 5 and 8.

³That is: dietary with 13.1 per cent; laundry, linen service, and housekeeping with 8.3 per cent; the rest being administration, and plant operation and maintenance; Dominion Bureau of Statistics, *Hospital Statistics 1960*, Vol. VI, Hospital Expenditures, Ottawa: Queen's Printer, 1963, p. 45.

⁴Such as, for instance, nursing which accounted for 26.5 per cent of total expenditure; *ibid.*

the total operating cost would have to take into account the cost of maintaining the patient at home, which may be increased substantially where extensive housekeeping and other ancillary services are required.

REHABILITATION

The brevity of the treatment accorded this subject in our Report should not be permitted to reflect upon the importance we attach to rehabilitation. It received much prominence in the evidence submitted to us in the briefs and during the hearings, as well as in our research programme.¹ Rehabilitation, however, is not a specific type of service but rather an objective underlying a great variety of services, some of which are part of the traditional health services while others are new, at least to the health field.

Rehabilitation, like the principle of prevention at the other end of the health service spectrum,² is part of the desirable approach to, and the philosophy of, health and health services. In a report such as ours we can do little more than underline the need for applying the principle of rehabilitation throughout the range of services given to the patient after disease or injury have struck. We also emphasize the need for strengthening those health services which are specifically oriented towards rehabilitation. Their components in terms of personnel and physical facilities are included in our evaluation of these resources elsewhere in this Report.¹ But rehabilitation frequently means more than just medical restoration.

It is not always easy to identify the point where treatment ends and rehabilitation begins. In principle one can say that treatment cures, arrests or alleviates the symptoms of illness or injury while rehabilitation is concerned with removing any residual consequences resulting from an illness.

These residuals may be of a social or economic nature. In other words, we are no longer content with successfully amputating a man's leg should this be necessary, but we are also anxious to restore him as closely as possible to his former social roles or to some role in the family and community which he can successfully perform. For patients in the labour force ages, rehabilitation may mean aptitude tests, vocational or academic training, placement, perhaps financial assistance. For children of school age special schooling may be required. Somewhat different will be the rehabilitation services for those above the retirement age who may be restored from helplessness and dependency to self-care and a considerable degree of inde-

¹ See also Kohn, R., *op. cit.*

² Of prevention, diagnosis, treatment, and rehabilitation.

³ See Chapters 13 and 14.

pendence. For the very young, for example babies with congenital defects, it is a matter of habilitation—learning rather than rehabilitation—regaining something that had been lost. The aims and basic methods of rehabilitation are the same, however, regardless of the patient's stage in life.

We have compared the principle of prevention with that of rehabilitation, denoting a purpose rather than a specific service. Both also establish a link between health care and other measures or services making it practically impossible to establish the boundaries of health, and therefore also of health care and services. In the field of rehabilitation we have established the need for specific services such as those of the physiatrist, the physiotherapist and other therapists, the psychiatrist and psychologist, and facilities such as the rehabilitation wings in hospitals and rehabilitation centres.

The services typical of rehabilitation procedures have increased in Canadian hospitals in recent years, and what distinct units and centres are in operation in public institutions are of comparatively recent origins following those established earlier by the Department of Veterans Affairs and Workmen's Compensation Boards. Table 15-5 shows the upward trend during one recent year in the percentage of general and chronic hospitals providing some of these services in organized units, the trend being more pronounced in the chronic hospitals.

TABLE 15-5 PERCENTAGE OF GENERAL AND CHRONIC HOSPITALS WITH SPECIFIED ORGANIZED SERVICES, CANADA, 1959 AND 1960

Service	Per Cent of Hospitals with Organized Units			
	General Hospitals		Chronic Hospitals	
	1959	1960	1959	1960
Physical Medicine.....	2.5	2.5	5.4	12.2
Physiotherapy.....	26.7	31.5	42.9	70.8
Occupational Therapy.....	3.4	3.8	23.2	43.9
Speech Therapy.....	1.7	2.5	7.1	17.1
Social Service.....	4.4	4.6	10.7	12.2

SOURCE: Dominion Bureau of Statistics, *Hospital Statistics*, Vol. II, Hospital Services, 1959, p. 76, and *ibid.*, 1960, p. 92, Ottawa: Queen's Printer, 1964.

By 1962, physical medicine and rehabilitation services¹ were established in:

- 30 general hospitals,
- 10 chronic hospitals,

¹Information supplied by the Department of National Health and Welfare.

- 14 children's hospitals,
- 12 hospitals administered by the Department of Veterans Affairs.

There were 43 independent rehabilitation centres, distributed as follows:

- 16 general rehabilitation centres (for children and adults with any type of disability),
- 23 children's rehabilitation centres (including 11 for cerebral palsy),
- 4 workmen's compensation centres (Quebec, Ontario, Alberta, British Columbia).

Medical rehabilitation services in nearly all of the in-patient hospitals and centres¹ are directed by orthopaedists or paediatrists.

The beds set up by 1962 in these rehabilitation units and centres totalled 18,840. Of these, 784 beds in 15 hospitals were designated as "rehabilitation", "orthopaedic", "geriatric", "convalescent" or "polio". Of the 1,693 beds in the 10 chronic hospitals, 349 were similarly designated. Fourteen rehabilitation centres with in-patient facilities had a total of 933 beds.²

The Department of National Health and Welfare estimates that in 1962, at least 20,000 disabled persons were treated as out-patients or in-patients at the general and children's rehabilitation centres in addition to some 12,000 treated at the workmen's compensation centres.

On the whole, rehabilitation services in Canada are insufficient. What has been said recently of Ontario applies generally:

"In certain areas there are few or no facilities for physical restoration, speech therapy, job assessment, psychiatric care, or provision of braces or artificial limbs. Most centres are located in the larger cities but even in communities where the greatest number of rehabilitation services exist they are barely adequate and there are waiting lists for admission".³

One might add that the potential of rehabilitation is as yet far from being fully appreciated by the disabled and even some physicians.

In addition to the facilities and services provided in hospitals and rehabilitation centres, there is a considerable number of clinics operated by voluntary agencies providing certain rehabilitation services but not the wide-range found in the centres. These may be operated for certain types of disabilities or certain services such as physiotherapy. Some of these agencies also employ mobile units to reach their patients.

¹ Generally covered under the provincial hospital insurance schemes.

² 567 beds in 9 general rehabilitation centres, 186 beds in 4 children's rehabilitation centres, 180 beds in workmen's compensation centres.

³ Godfrey, C. M., Jousse, A. T.: "Rehabilitation Facilities in Ontario," in *The Canadian Medical Association Journal*, Sept. 28, 1963, Vol. 89, pp. 657-662.

Facilities and Personnel

We have described rehabilitation not as a type of service but as a concept or objective receiving increasing emphasis at the various stages of treating the sick and injured. In particular, rehabilitation is not confined to hospital units or centres designated for this purpose: on the contrary, there is a strong tendency to get patients out of institutions and to adjust them as effectively as possible to their optimal role in the home and community. This applies to both physical and psychiatric disorders and care. The designation of certain facilities as "rehabilitation" is therefore arbitrary to a certain extent. We have found it difficult to distinguish clearly between treatment and rehabilitation. Similarly it is not always easy to separate facilities for rehabilitation, convalescent, or geriatric care. For instance any hospital units designated as convalescent, geriatric, chronic, or orthopaedic will have a strong element of rehabilitation service whereas on the other hand, beds earmarked for "rehabilitation", may well be used for acute or chronic treatment.

No general standard has as yet been developed for the bed requirements for rehabilitation services, because we have nowhere reached all the disabled who could profit from rehabilitation. Therefore we do not know what the case load and the demand would be once we reach the saturation point:

"... no matter how big your rehabilitation facilities may be, they seldom seem adequate to meet all of the hidden need . . ." ¹

Desirable bed ratios ranging from 0.5 to one bed per 1,000 population are sometimes mentioned, as is the desirability of a rehabilitation unit in all general hospitals above a given size (from, say 100 to 300 beds), or a rehabilitation centre for communities with about 300,000 population or over.

None of the recent major surveys of hospital needs carried out in various parts of Canada specify the number or ratio of rehabilitation beds required, though they invariably stress the need for strengthening the rehabilitation services in hospitals. The Saskatchewan Hospital Survey distinguishes various levels of rehabilitation services, the most elaborate being provided by "base services", followed by "regional", "district", and "itinerant services".² Because of the unknown reservoir of the disabled in the community and the extent of treatment outside the hospital, the Survey of Hospital Needs in Metropolitan Toronto came to the conclusion that "there

¹ Carpendale, M. T. F., *The Need for Medical Rehabilitation: Experience in Alberta—1956-1959*, in "Rehabilitation in Canada," Department of Labour, Ottawa, Summer 1963, p. 17.

² Summary of *Saskatchewan Hospital Survey and Master Plan 1961*, Part I, A Report of the Hospital Survey Committee, Health Services Planning Commission, Saskatchewan Department of Public Health, Regina: February 1963.

is no magic formula for determining the number of beds or facilities required for the care of chronically ill children or of the physically incapacitated".¹

Nevertheless, physical medicine and psychiatry have developed a body of knowledge and techniques aimed directly at the rehabilitation of the handicapped. This has led to the establishment of rehabilitation units in hospitals and rehabilitation centres to supplement these units where necessary, and it has also brought about a strengthening of rehabilitation services and personnel in hospitals with or without a formal rehabilitation unit or rehabilitation beds.²

It is the social worker or the social service department that is instrumental in helping the patient to bridge the gap between the health service and other social services he may require. Sometimes this task is performed by the visiting nurse. In the context of modern rehabilitation services we also find psychologists, vocational guidance services, and placement officers attached to rehabilitation units or centres. The transition from occupational therapy to vocational training is sometimes far from clear cut, for instance in rehabilitation centres operated by Workmen's Compensation Boards, and regular school classes which are held in rehabilitation centres for children.

This emphasizes the need for closest co-ordination between the health services proper and other community services which are equally essential if the patient is to derive the full benefit from his medical restoration. These other services fall under the administrative jurisdiction of departments of education, labour, or welfare whose effective co-ordination is as difficult as it is necessary.³

Prosthetic Devices, Appliances, and Aids

Among the services not discussed elsewhere in this Report is the provision of prosthetic devices, appliances, and aids which in many cases form an essential part of the rehabilitation process.

The lack of data regarding the number and characteristics of people who could profit from modern rehabilitation procedures prevents any attempt

¹ *Hospital Accommodation and Facilities for Children in Metropolitan Toronto*, Part Six of a Study by the Committee for Survey of Hospital Needs in Metropolitan Toronto; November 1962, p. 43.

² *Saskatchewan Hospital Survey and Master Plan 1961, op. cit.*, estimates the minimum number of personnel required to staff "adequate hospital-centred rehabilitation programs" in Saskatchewan 1961-1970, as follows:

Physical Medicine	9
Physical Therapy	46
Occupational Therapy	18
Speech Therapy	6
Medical Social Work	11

The population of Saskatchewan is estimated in the Report to reach 971,204 by 1970.

³ A problem which will be further discussed in Volume II of this Report.

to estimate the extent to which specific services are or will be required. Further study and experience is needed but this does not diminish the need to take positive action in dealing with some of the groups that exist in this field.¹

CONCLUSION

Home care and rehabilitation, two of the patterns of service emerging in the health services complex, are closely related. Like the new approach to the care of psychiatric disease and the development of medical group practice, they do not so much represent new types of services as new methods of employing and organizing a multiplicity of services. While they do not lend themselves as we have observed, to the same kind of quantitative analysis to which we can subject matters of the supply of personnel and facilities, these new forms of organization of our health services will mean changes and shifts in the demand for specific services. To the extent, for instance, that a home care plan keeps patients out of the hospital, it will mean more time consuming home calls for the physician; on the other hand, however, the need for home calls will be less frequent due to the fact that visits by the nurse and other health workers in the home care plan will to some extent substitute for the physician's visits. The new possibilities of active treatment and rehabilitation in the field of chronic disease, both physical and mental, will mean a shift from long-term largely custodial—and therefore less expensive—institutional care to shorter but costlier active care. This will result in better and more effective care and we may also find that the shorter duration of care with a high unit cost will often compensate for the high total cost of long-term care with a lower unit cost.

The characteristics and implications of new patterns in the organization, provision, and utilization of the various health services will be further discussed in Volume II of the Report. They are bound to be affected by the new methods of financing health services which we recommend. It may suffice here to stress the fact that good health services require not only personnel and facilities, and not only an equitable way of financing but also an effective organization and co-ordination of the many facets of our system of health services proper and other community services required to supplement and complete, as in the course of rehabilitation, what medical science can accomplish.

Having established the various benefits to be derived from organized home care programmes, and in view of the fact that experience has shown

¹ See Chapter 2, Recommendations 113-115.

their particular contribution in the care of the aged and chronically ill, which are among our main health problems, we recommend measures to foster the implementation of home care plans.¹

We reiterate the importance of rehabilitation as an essential range of services in restoring the individual to a useful role in the community. We recommend measures to expand specialist manpower in the field of physical medicine² and the provision of physiotherapy and, where applicable, of prosthetic and orthotic devices, appliances, and aids, as medical benefits under the Health Services Programme.³ Because of the growing demand for prosthetic services of all types, as well as in order to keep pace with the rapid advances in the technology of the various devices, we also recommend that particular attention be given to research related to these matters.⁴

¹ Chapter 2, Recommendations 116-123.

² Chapter 2, Recommendations 151-152.

³ Chapter 2, Recommendations 30(k) and (1), 113 and 114.

⁴ Chapter 2, Recommendation 115.

Drug Industry

Our Terms of Reference require us to provide estimated costs of health services now being rendered to Canadians with projected costs of any changes that may be recommended for the extension of existing programmes or for any new programmes which we may suggest.

Since prescribed drugs are an essential and integral part of health care, we pointed out in Chapter 2 that a comprehensive and universal health care programme should include them as a benefit.¹ Our views are shared by the Canadian Pharmaceutical Association which stated that "any comprehensive health care plan must include the provision of drugs and pharmaceutical services".²

Drug expenditures are a major drain on the financial resources of a consumer, particularly in cases of serious and prolonged illness requiring high priced drugs. We have established in Chapter 9 that expenditures on drugs are almost as large as outlays on medical care in Canada.³

Many complaints were heard about high drug prices in Canada, but submissions from drug manufacturers claim that drug prices have risen less rapidly than prices of most other consumer goods and services.⁴ In Chapter 17, evidence is presented which indicates that drug prices in Canada are among the highest of any industrialized nation in the world, and that prices paid for identical drugs by the individual consumer are in a number of cases several times the prices for which these drugs can be made available through institutions, e.g., hospitals, government agencies, etc.

Chapter 17 also examines the claim of the drug industry that drug prices on the whole have risen very little in the post-war period. This claim is based on the Drug Price Index which forms part of the Consumer Price Index compiled by the Dominion Bureau of Statistics. This Index covers

¹ See Chapter 2, Recommendation 58.

² *The Canadian Pharmaceutical Association, Inc.*, brief submitted to the Royal Commission on Health Services, Toronto, May 1962, p. 159.

³ Drug expenditures covering both prescribed and non-prescribed drugs in 1961 were equivalent to 95 per cent of expenditures made on physicians' services in Canada in that year.

⁴ *Canadian Pharmaceutical Manufacturers Association*, brief submitted to the Royal Commission on Health Services, Toronto 1962, pp. 40-41.

five drug items whose prices have changed comparatively little over the post-war period, a minute fraction of the several thousand drug items in use in Canada as prescription drugs. It does not reflect many of the high priced pharmaceuticals that have come on the market in recent years.

The data in Chapter 17 indicate that the majority of prescribed drugs are in the lower priced category. But, when prolonged or serious illness strikes, the cost of drugs payable by those who can frequently least afford to pay for them is a heavy burden on the families affected.

We are primarily concerned with (1) assessing the essential role of prescribed drugs as part of an integrated health service, (2) estimating the costs of providing such services and the increased costs that may result from a more extensive programme recommended, (3) indicating some of the more important factors contributing to the level of drug costs and prices presently prevailing in Canada, and (4) recommending measures which governments could take to enable the drug industry to bring costs and prices of drugs down to a level which would be more acceptable to the Canadian public, and which would facilitate the implementation and financing of a comprehensive prepaid drug programme in Canada such as we recommend in Chapter 2.

In essence then we are concerned with what it would cost Canadians to obtain the necessary drug benefits and how the burden of providing such services can be shared effectively and equitably.

In preparing the estimates of the future costs of a prepayment programme for prescribed drugs, we had to consider the question of whether we should base our estimates on the assumption that governments in the future will take an increasing interest in the subject of drug costs and prices and whether such growing interest might lead to measures designed to bring about prices of drugs in Canada as low as can be achieved through economic production and distribution while still maintaining high quality.

As an alternative we would have had to assume that governments would leave drug prices to be settled in the market place and not change the various protective devices which apparently contribute to keeping up prices on drugs, e.g., certain provisions relating to patents, trademarks and tariffs.

Chapter 9 indicates that the public is concerned about costs and prices of drugs and that in response to this concern a number of legislatures in Canada have pursued various inquiries and investigations leading to reports and recommendations dealing with the quality and price of drugs. We are, therefore, concluding that we should take account of the growing public interest in this area and the increasing concern shown by legislatures, and assume that the various inquiries undertaken or likely to be pursued in the future might lead to the adoption by legislatures of some measures directed toward lowering of prices of prescribed drugs sold in Canada.

In order to make the appropriate recommendations in the drug field, we have reviewed the structure of the Canadian drug industry, trends of costs and prices of drugs and the effect of legislative provisions on costs and prices. We have relied greatly on the numerous inquiries pursued by legislatures, and on the various submissions and evidence put before the Commission as well as on the work of other Commissions and Committees of Enquiry.¹

This chapter presents the existing pattern of manufacturing and distribution of drugs—the latter including wholesale and retail distribution—, foreign control of the drug industry in Canada, domestic production and imports, advertising and promotion, and research and development. In Chapter 17, which deals with drug costs and prices, an examination is made of the components of the present price and cost structure of drugs covering manufacturing, wholesaling and retailing, drugs imported and manufactured in Canada, price trends covering the post-war period, and an international comparison of drug prices. Chapter 17 also reviews existing legislation affecting the manufacture and distribution of drugs including the Patent Act, Trade Marks Act, Tariffs, and other legislation.

This chapter and Chapter 17 also include an assessment of other problems in the drug field in Canada, some of which are of significant importance to merit consideration by governments. We have, therefore, made appropriate recommendations concerning drugs in Chapter 2.²

EXISTING PATTERNS OF MANUFACTURE AND DISTRIBUTION

Manufacture

The Dominion Bureau of Statistics publication "Manufacturers of Pharmaceuticals and Medicines" for the year 1960 reports that the industry was composed of 198 establishments, and the selling value of their shipments amounted to \$165 million. These manufacturing establishments are concentrated in Ontario and Quebec which jointly account for 98 per cent of the total of 7,994 persons employed in the industry.³ Approximately 92 per cent of the total value of all products shipped by the industry in 1960 consisted of medicines and pharmaceuticals, the remainder was comprised of disinfectants, insecticides, toilet preparations, etc.⁴ Of the total shipments of medicines and pharmaceuticals, 16 per cent consisted of proprietary products which comprise the familiar patent medicines and home remedies.

¹ See Chapters 2 and 9.

² See Chapter 2, Recommendations 58-82.

³ Restrictive Trade Practices Commission, *Report Concerning the Manufacture, Distribution and Sale of Drugs*, Ottawa: Queen's Printer, 1963, p. 37.

⁴ *Ibid.*, p. 40.

In the Dominion Bureau of Statistics publication covering 1959, the industry was reported to comprise 188 establishments. Of these the Canadian Pharmaceutical Manufacturers Association estimated that about 70 were multiple-line ethical drug manufacturers, 75 were multiple-line proprietary drug manufacturers, and the balance were agents, wholesalers and retailers who also manufactured some medicinals, plus packaging concerns and other suppliers. In addition there were two major companies, not listed by the Dominion Bureau of Statistics in that year, which did manufacture ethical pharmaceuticals and which were members of the Association.¹

The principal types of manufacturers in the ethical drug field are described in the Green Book as follows:

"(a) *Manufacturers of basic drugs.* Some firms, of which Fine Chemicals of Canada Limited is an example, simply manufacture basic drugs and sell these drugs in bulk to other firms. Also, U.S. and European firms which simply manufacture basic drugs maintain sales agencies in Canada. The large ethical drug firms mentioned in the next paragraph also manufacture basic drugs and some sell certain of these drugs in bulk form and in prepared dosage forms, in bulk quantities, to other manufacturers and distributors. They also, of course, sell prepared dosage forms under their own labels through their own sales organizations to the trade and public.

"(b) *Large ethical drug houses.* These firms specialize in ethical drugs, although they may carry a few proprietary drug lines. In some cases, one firm will operate in the ethical drug field while a related firm will operate in the proprietary medicine and sundry field. Thus, Bristol Laboratories of Canada, Ltd. is a related company to Bristol-Myers Company and Riker Pharmaceutical Company, Limited is the ethical drug firm of the Rexall Drug group. The principal characteristics of the large ethical drug firms are that they have the facilities to manufacture and prepare complicated drugs and dosage forms of these drugs, that they carry on research, that they are able to develop company specialties either by developing new drugs or by developing combinations which have or are claimed to have unique properties, and that they are able to carry out promotional activities on a scale that ensures that their products are known and recognized by the medical and pharmacal professions. These firms have established reputations, which appear to be fully deserved, for high-quality products. Much of the research, development of specialty products and quality control exercised in the preparation of products is carried on outside Canada.

"(c) *Small ethical drug houses.* These vary widely in size but seem to be generally differentiated from the large ethical drug houses not only on the basis of size or volume of business, but also because they do not deal in the newer and more complex drugs (unless they merely purchase such drugs for resale); they carry on little or no research,"² "they are not able to develop new drugs or important specialties and they are unable to carry on elaborate promotional campaigns. The products which they do sell may be of high quality, indeed some have usually been purchased from the large ethical drug houses and are identical with those sold by the latter, but the small firms do not enjoy the same reputation as the large firms.

¹ *Canadian Pharmaceutical Manufacturers Association, op. cit.*, p. 23.

² This statement is being disputed in representations to the Restrictive Trade Practices Commission; the President of Nordic Chemicals Limited denied the suggestion that no small drug houses carry on research on the same scale as their larger rivals.

"(d) *Specialty firms in the ethical drug field.* Some firms are small in terms of volume of business because they specialize in a particular field of drugs but, within that field, their products are generally recognized as being among the best available. An example is Baxter Laboratories of Canada, Limited which specializes in parenteral solutions and related products. (Baxter Laboratories of Canada, Limited is a wholly-owned subsidiary of Baxter Laboratories, Inc., Illinois.)

"(e) *Custom manufacturers and packagers.* Some firms are custom manufacturers or packagers. They either buy or are supplied with the basic drugs and prepare dosage forms and package them for other firms. They do not, themselves, sell directly to the trade or the public. The information supplied to the Director indicates that the number of these firms is increasing, apparently as small manufacturers and distributors wish to add products made to their orders and specifications to their lines.

"(f) Certain firms whose main business is in related fields are important distributors of drugs. Ingram & Bell Limited, for example, does the bulk of its business in surgical supplies and hospital equipment, but also does a large business in drugs. It sells drug products which it manufactures or has manufactured to its specifications and acts as the national distributor for certain other manufacturers.

"(g) Many foreign firms do not have branches or subsidiaries in Canada, but are represented by agents in Canada. These firms usually have a limited line of products and do only a relatively small amount of business in Canada. In these cases, the drug products come into Canada packaged and ready for resale."¹

In their representations to us both the Canadian Pharmaceutical Association² and the Canadian Pharmaceutical Manufacturers Association³ advanced the suggestion that the large number of firms in the industry and the small share of the market held by each, means that there is little concentration of market power. The implication is that the existence of effective competition may properly be assumed. In our view, however, the statistics by themselves do not support such a conclusion.

The facts are that in 1959, 38 firms reported factory shipments in excess of \$1 million and accounted for 84 per cent of the total for the industry. The remaining 16 per cent was accounted for by 149 firms, 82 of which reported factory shipments amounting to less than \$100,000.⁴ Of the 38 firms reporting factory shipments in the ethical drug field in excess of \$1 million, 29 can be identified as follows:

Abbott Laboratories Limited
Anca Laboratories
Ayerst, McKenna & Harrison Limited
Baxter Laboratories of Canada Ltd.
Bristol Laboratories of Canada Limited

¹ Green Book, *op. cit.*, pp. 61-62.

² *The Canadian Pharmaceutical Association Inc., op. cit.*, p. 42.

³ *Canadian Pharmaceutical Manufacturers Association, op. cit.*, p. 26.

⁴ *Ibid.*

The British Drug Houses (Canada) Ltd.
Burroughs-Wellcome & Co. (Canada) Ltd.
Ciba Company Limited
Charles E. Frosst & Co.
Geigy Pharmaceuticals, Division of Geigy (Canada) Limited
Frank W. Horner Limited
Laboratoires Nadeau Limitée
Lederle/Cyanamid of Canada Ltd.
Eli Lilly & Company (Canada) Limited
Merck Sharp & Dohme of Canada Ltd.
The Wm. S. Merrell Company
Ortho Pharmaceutical (Canada) Ltd.
Parke-Davis & Company, Ltd.
Pfizer Canada
Poulenc Limitée
A. H. Robins Company of Canada Ltd.
Rougier Inc.
Schering Corporation Limited
Smith Kline & French Inter American Corporation
E. R. Squibb & Sons of Canada Limited
The Upjohn Company of Canada
Warner-Chilcott Laboratories Co. Limited
Winthrop Laboratories of Canada Ltd.
John Wyeth & Brother (Canada) Ltd.¹

The competitive impact of the majority of the remaining firms in the industry is likely to be small and may thus not offer a major challenge to the position of the larger companies, most of whom have international connections.

There is another more basic reason for questioning the suggestion that a large number of firms in the industry provides assurance that competition will be effective. This is that drugs are used to treat specific conditions. Many drugs do not have close substitutes and can scarcely be considered competing products in any real sense. Even where a number of drugs may be prescribed for the same condition, there may be few firms with competitive products on the market, if others have been excluded by the existence of patents, or the successful promotion of certain brand names. Where the consumer cannot substitute one product for another because of the specific character of the remedy or where the producer cannot shift from the production of one product to the production of another because of patent obstacles or the expense of promoting a new brand, it is necessary to consider the conditions affecting the supply of each individual drug in order to make a valid judgment about the degree of concentration or the effectiveness of competition which exists.

In response to our request the Canadian Pharmaceutical Manufacturers Association on April 30, 1962 provided us with answers in the form of a brief to a number of specific questions we had asked about the

¹ Green Book, *op. cit.*, p. 146.

industry. For the purpose of answering the questionnaire a survey of 40 pharmaceutical manufacturing companies was undertaken by Clarkson, Gordon & Co. of Toronto covering the year 1960, henceforth called the Clarkson Survey. Five firms were unable to provide a detailed breakdown of sales according to the classification required and the questionnaire therefore depended upon the answers received from 35 companies. These 35 companies reported sales of human pharmaceuticals of \$102,633,000, or 62 per cent of total sales in Canada. They included most of the large companies referred to above by the Director of Investigation and Research under the Combines Act. Of the total sales by these companies of human pharmaceuticals \$38.7 million or 37.6 per cent were sales to wholesalers; \$37.1 million or 36.2 per cent were direct sales to druggists including drug chains and dispensing physicians; \$19.8 million or 19.3 per cent took form of sales to general hospitals and institutions; \$4 million or 3.9 per cent were sales to governments; and \$3.1 million or 3 per cent represented export shipments. These 35 companies also made sales of veterinary pharmaceuticals, proprietary medicines, chemicals and other products amounting to \$16.9 million. Information covering sales to other manufacturers and importers was not given separately for these 35 companies. However, all 40 companies reported that they manufactured \$3 million worth of merchandise, including \$2.8 million of human pharmaceuticals for other members of the Canadian Pharmaceutical Manufacturers Association. In the above breakdown, sales to governments, to hospitals, and on export are low-priced sales and therefore represent a higher proportion of volume than they do of value.

Wholesale Distribution

According to the 1951 Census of Canada there were at that time 141 wholesale distributors of drugs and drug sundries.¹ From 1951 to 1959 sales by all wholesale distributors of drugs increased by approximately 64 per cent reaching a total of around \$220 million in 1959.² "True" drug wholesalers, which might be defined to include only those carrying a complete stock of pharmaceuticals, are estimated to have numbered only about 42 in 1961.³ Apart from the wholesale distributor proper, the other main class of operation covered by the Census in the distributing depot which stocks and handles the products of one manufacturer only. Such depots are usually either owned or controlled by the manufacturer.

A full-line drug wholesaler may stock upwards of 8,000 pharmaceutical products, plus sick-room supplies, first-aid products, fine chemicals,

¹ The 1961 data were not available when this chapter was drafted. This is another example of data losing their usefulness because of the time taken to publish them.

² Green Book, *op. cit.*, p. 81.

³ The Canadian Pharmaceutical Association, Inc., *op. cit.*, p. 61.

essential oils, elastic support products, health appliances, prescription glassware, patent and proprietary medicines, toilet articles and cosmetics, for a total inventory of some 27,000 items. A druggist can usually purchase more economically from a manufacturer than from a wholesaler. The druggist's savings from direct buying may not be appreciable, however, unless his order reaches a minimum size. He is therefore likely to buy directly from the manufacturer those drugs which he sells in considerable quantity and to obtain from the wholesaler those drugs he sells in small volume. The wholesaler in effect carries the stock for the retail druggist and permits the latter to operate with a smaller inventory.

Apart from the large number of items carried there are several other distinctive features about the operations of drug wholesalers. For example, it is necessary for a wholesaler to obtain a signed order from a licensed pharmacist before he may deliver any one of 452 narcotic preparations and 929 "controlled drug" preparations. These items involve reports and records under the Narcotic Control Act and the Food and Drugs Act. Another distinctive feature of the wholesale drug business is that shipments are usually made in less than case lot quantities thus requiring additional handling. Only 9 per cent of all orders are for original case quantities.¹ Other uncommon features of the drug wholesale business are that many wholesalers provide same-day service and also maintain an emergency 24-hour service. Also many wholesalers employ registered pharmacists to maintain control over the handling of potent or restricted drugs. Finally, wholesale drug firms, whose main business is distributing the products of other manufacturers, frequently package and sell a limited line of the more common proprietary drugs and household remedies under their own labels.²

Nearly 96 per cent of total sales by drug wholesalers in 1957 were made to retailers, only 2.5 per cent to hospitals and institutions, 1.5 per cent to other wholesalers and 0.2 per cent to other buyers.³ An indication that this situation may be changing is given in the submission made by Dr. J. L. Summers, Director of Pharmaceutical Services of the University Hospital in Saskatoon who said: "As far as the hospital is concerned, we use the wholesale to a very large degree because we find it impossible to stock all drugs, and we use the wholesale as sort of an additional stock-room to get small quantities of drugs on very short notice. There are a number of suppliers who supply only through wholesale, and therefore in this area we deal with the wholesale in very large volume".⁴ Also a survey of purchases by 162

¹ *Ibid.*, pp. 60-61.

² Green Book, *op. cit.*, p. 62.

³ Department of National Health and Welfare Research and Statistics Division. *Report on the Provision, Distribution, and Cost of Drugs in Canada*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

⁴ Transcript of evidence, *Hearings*, January 24, 1962, Vol. 19, p. 4467.

hospitals in Ontario, covering the year 1959, showed that smaller hospitals obtained almost 23 per cent of their drugs from wholesale distributors, while even the larger hospitals affiliated with the medical schools obtained almost 16 per cent of their drugs from the same source.¹

Retail Distribution

Drugs are available to the consuming public or to segments of it through retail pharmacies, hospital pharmacies, dispensing physicians, government agencies, industrial dispensaries, volunteer and other health agencies, and private institutions such as nursing homes, etc. Physicians in every province may legally dispense the drugs which are required by their own patients. Also, under certain circumstances, they may register to provide pharmacy services to other than their own patients. This is particularly common in remote areas. As much as \$15 million worth of drugs at retail value may be dispensed in this way.² The government agencies which actually dispense drugs include the federal departments of National Defence, of Veterans Affairs, and of National Health and Welfare (Indian and Northern Health Services), provincial government dispensaries for some indigent and welfare cases, and at the municipal level, community health offices providing immunization services, and some school boards which provide vitamins, etc. Industrial dispensaries, in addition to acting as first-aid stations, may make drugs available for on-the-job needs and prophylaxis programmes.³

The various services provided by the retail pharmacist may be summarized as follows:

1. Maintaining adequate supplies of drugs even of those in little demand.
2. Standing subject to call 24 hours a day.
3. Acting as a source of information to the physician regarding the efficacy or contra-indications of drugs.
4. Acting as a reminder to the customer with regard to the proper method of using the prescribed drug.
5. Acting as a check on possible errors in the physician's prescription.
6. Maintaining a close check on repeat prescriptions.
7. Assuming legal responsibility for dispensing certain drugs (there is a wide range of drugs and poisonous materials apart from prescription items, the retailing of which is restricted by law to pharmacists).
8. Making the pharmacy premises available as a place of first aid.
9. Stocking vaccines for public health programmes.

¹ Report of the Select Committee of the Ontario Legislature on *The Cost of Drugs*, 1963, Appendix C.

² Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

³ *Ibid.*

10. Giving customers advice on the relative merits of non-prescription products for treatment of self-diagnosed minor ailments.

Over the years there has been a great increase in the supply by manufacturers of drugs already put up in prepared dosage forms. As a result, in most cases less than 50 per cent¹ of the druggist's time is devoted to professional dispensing work as distinguished from selling activities related to other merchandise.² The Saskatchewan Pharmaceutical Association estimated that just under 10 per cent of all prescriptions issued in Saskatchewan retail drug stores are compounded in the store.³ Even this low figure appears to be somewhat high judged by other estimates which were given to us. In British Columbia in 1960, compounded prescriptions are estimated to have accounted for 3 per cent of the total number of prescriptions and only 2.5 per cent of the total dollar volume.⁴ In its Report the Restrictive Trade Practices Commission quotes two other estimates, both based on surveys, one by the Alberta Pharmaceutical Association which reached the conclusion that only 3.96 per cent of all prescriptions in that province were compounded by the pharmacist, and the other by Dean F. N. Hughes and Professor G. C. Walker who estimated that only 5 per cent of all prescriptions were compounded by pharmacists. The result of this change, according to the Canadian Pharmaceutical Association, is that "... In practice, pharmacy techniques have become less important, while Pharmacy's knowledge of medicinals, their uses, contra-indications, dosages and toxicity have become increasingly vital..."⁵

The most important reason for the increased supply by the manufacturer of drugs in dosage form is that dosage forms of certain of the newer drugs and combinations of drugs particularly, require more elaborate control and handling than can be done conveniently at the pharmacist's level. There can be little doubt, however, that a contributing reason for the change is the increasing use of trade names for particular combinations of ethical drugs. In any event, the evidence presented to us supports the contention that the role of the pharmacist is changing requiring more intensive professional training. The majority of provinces in their regulations governing the registration of pharmacists now require four years of academic training and a relatively short period of apprenticeship.⁶ In such circumstances where the druggist is highly qualified academically he may act as a valuable consultant

¹ Transcript, *op. cit.*, January 24, 1962, Vol. 19, p. 4432.

² See section on drug retailing in Chapter 17.

³ Transcript, *op. cit.*, January 24, 1962, Vol. 19, p. 4432.

⁴ *Ibid.*, February 21, 1962, Vol. 29, p. 6312.

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 384.

⁶ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

to the physician on the efficacy and safety of drugs, and as a source of current information about drugs for the physician.

Dominion Bureau of Statistics figures for 1961 show that independent drug stores had total sales of \$362 million and chain drug stores had total sales of \$56 million.¹ According to the Canadian Pharmaceutical Association about 90 per cent of all drug stores are individually owned and operated. The chain stores numbered only 431 stores altogether and these were operated by 39 companies so that it is clear there are no giants in drug retailing.² The Association's annual survey for 1960, (which is based on 664 pharmacies or one out of every eight in Canada) reveals that the average Canadian retail pharmacy reporting had a sales volume of \$106,688. The average pharmacy dispensed 8,846 prescriptions or 24 per day, at an average price of \$3.06.³ However, 61 per cent of all druggists sell below the average sales volume, and in fact 11 per cent sell below \$50,000 per annum.⁴

The annual surveys conducted by Professor H. J. Fuller on behalf of the Canadian Pharmaceutical Association reported in the Canadian Pharmaceutical Journal, show that prescription sales are becoming an increasingly important part of the average retail druggist's business. The following are the percentage figures based on the surveys in the indicated years:

1951	15.1
1952	18.2
1953	16.3
1954	19.8
1955	20.0
1956	22.1
1957	23.7
1958	23.6
1959	26.0
1960	25.0
1961	26.0

The point was made to us in our hearings that in many cases it was possible for retail druggists to provide pharmacy services to their community only because they were also selling a great many other products.

The Canadian Pharmaceutical Association stated that the "average" Canadian retail pharmacy, covered in the Association's annual survey, reported that 25 per cent of sales were from prescription drugs and 75 per cent from sundry items.⁵ The Association concluded that most stores could

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 380.

² *Ibid.*, p. 386.

³ *Canadian Pharmaceutical Journal*, Volume 94, Number 9, September 1961, pp. 2 and 3.

⁴ *The Canadian Pharmaceutical Association Inc.*, *op. cit.*, p. 70.

⁵ *Ibid.*, p. 69.

not survive if their operations were confined to pharmacy services.¹ A similar point was also made by the Ontario Retail Pharmacists' Association: "the pharmacist in answer to public demand entered into what has been called the drug sundries field and the bulk of the business of the retail pharmacy today consists of drug sundries".²

The Select Committee of the Ontario Legislature observed that it is "economically essential for a pharmacy to sell commodities and merchandise other than drugs. The revenue from the operation of a pharmacy which can be allocated to the prescription department averages slightly more than 20% of the gross store revenue from sundries and non-proprietary items".³

The Select Committee went on to say: "Another anomaly in pharmacy operation which was brought to our notice is the situation wherein a pharmacist is required to be on duty at all times while his store is open. This presents an obvious difficulty to the store with only one pharmacist who, in order to leave the premises for any purpose, must close his store with an ensuing loss of revenue and presumable inconvenience to his customers".⁴

While presumably a drug store could stay open when the pharmacist left the premises for a short period after closing the section devoted to drug dispensing, clarification of the appropriate provincial legislative provisions seems desirable to deal with the presentations made by retail druggists.

In Manitoba a spot check of pharmacies in different areas of the province disclosed that the number of prescription drugs stocked, ranged from 1,300 to 5,700.⁵ In this survey approximately 5 per cent of all the drugs stocked bore an expiry date, that is, after a given date they might not be dispensed but had to be destroyed. This points to one of the special features of the retail drug business.

The retail pharmacist cannot merchandise his prescription drugs in the same way as an ordinary merchant. He cannot decide to have a sale because he is over-stocked or wishes to put in a new line, or wishes to dispose of a slow-moving line.⁶ He must wait upon the physician's prescription. As a result retail pharmacists do not have the same opportunity to engage in bulk purchasing of drugs as is possible, for example, in the case of large hospitals where the requirements for the more commonly used drugs can be anticipated fairly readily and purchases made accordingly. The retail

¹ *Ibid.*, pp. 66-71.

² The Ontario Retail Pharmacists' Association, brief submitted to the Royal Commission on Health Services, Toronto, May 1962, p. 7.

³ Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 30.

⁴ *Ibid.*

⁵ According to the Manitoba Pharmaceutical Association the number of drugs stocked depends mainly upon the number of physicians serving the area. *The Manitoba Pharmaceutical Association*, brief submitted to the Royal Commission on Health Services, Winnipeg, January 1962, p. 16.

⁶ Against this there is the practice of the drug manufacturer or wholesaler taking back outdated stock.

druggist, on the other hand, cannot readily do much bulk purchasing. If he did he might find that apart from having to meet the cost of maintaining an excessive inventory he could not sell the medication before it lost potency or otherwise deteriorated.¹

Drug stores in Canada are not only growing in number, in 1962 there were 4,937 versus 4,325 in 1951, but they are growing larger. If the total population is divided by the total number of pharmacies to give the average number of persons served per pharmacy, the figure for 1962 is 3,761 versus a figure of 3,418 for 1951.² Naturally the density of drug stores in relation to population varies considerably across the country. In 1960 the highest density existed in Saskatchewan where there was one drug store to serve every 2,849 people and the lowest density existed in Newfoundland where there was one retail pharmacy to serve 8,650 people.³ According to the Canadian Pharmaceutical Association there are 674 communities in Canada which are served by only one pharmacy.⁴

The opinion was expressed by the Canadian Pharmaceutical Association that throughout the 1950's the development of large shopping centres, the growth of the self-service idea in selling and other modern merchandising practices have altered both the appearance and the method of operation of the drug store. In the face of these developments the independent druggist finds himself at a competitive disadvantage in many ways, and as a consequence there appears to be taking place a gradual concentration of ownership into fewer hands. The larger chains are said to be expanding their outlets and the smaller chains, possibly with ten or less stores, are steadily growing in number.⁵

The Canadian Pharmaceutical Association made the point that in the larger cities there are some areas which appear to be over-served from the standpoint of the number of outlets. The Ontario Retail Pharmacists' Association,⁶ the Pharmaceutical Association of the Province of British Columbia,⁷ the Manitoba Pharmaceutical Association and the Saskatchewan Pharmaceutical Association also expressed the opinion that some saving might be possible if dispensing were concentrated in larger pharmacies, but the latter two qualified their comments by saying that most customers want the services of a community drug store.⁸ To the extent that customers really desire the services of a community or neighbourhood drug store as indicated by their willingness to pay higher prices for drugs, such stores will survive.

¹ Transcript, *op. cit.*, May 10, 1962, Vol. 50, p. 9561.

² Restrictive Trade Practices Commission, *op. cit.*, p. 378.

³ The Canadian Pharmaceutical Association, Inc., *op. cit.*, p. 85.

⁴ *Ibid.*, p. 71.

⁵ *Ibid.*, p. 86.

⁶ The Ontario Retail Pharmacists' Association, *op. cit.*, p. 30.

⁷ The Pharmaceutical Association of the Province of British Columbia, brief submitted to the Royal Commission on Health Services, Vancouver, February 1962, p. 30.

⁸ Restrictive Trade Practices Commission, *op. cit.*, p. 392.

To the extent that customers wish to have drugs dispensed at the lowest possible cost, it will be in their interest to encourage the development of dispensaries with a large turn over, which among other things can fully utilize the services of the professional pharmacist.

In many European countries the organization of the distribution of drugs differs greatly from that on the North American continent, and does not rely primarily upon market forces to control the density and location of retail pharmacies. An alternative system is illustrated by Denmark where the number and location of pharmacies is rigidly controlled. The activity of the pharmacist is confined to pharmaceuticals and one pharmacy under these circumstances is able to provide whatever pharmaceutical services are necessary for every 13,000 persons.¹ Because of the much greater distances in Canada it would not be practical for Canada to operate on such a ratio nor do we necessarily wish to follow a system of rigid control and allocation. But our objective should be to aim at maintaining greater flexibility in our distribution system than has been the case so far. The following comment by the Dean of the Faculty of Pharmacy, University of Toronto, appears appropriate:

"Proposals are sometimes made that medicines should be purchased centrally and distributed by a government agency, or alternatively that distribution to patients be through dispensaries established in clinics or in health centres. All aspects of the provision of pharmaceutical benefits were considered in the United Kingdom by the Committee on the Cost of Prescribing appointed by the Ministry of Health in 1957 under the chairmanship of Sir Henry Hinchliffe, after the National Health Service had been operating for some eight years. In connection with government purchase and distribution the Committee reported, in part: 'the high cost of setting up such a service as well as the administrative expenses often associated with central organizations would almost certainly increase the cost of medicines rather than reduce it.' In regard to distribution through Health Centres the Committee stated, in part: 'If Health Centres were to take over N.H.S. dispensing, the patients or those who fetch their medicines would, in many instances, have to travel long distances. The alternative of small dispensaries as widely scattered as retail pharmacies would be hopelessly expensive . . . The large number of retail pharmacies is only economically possible because two-thirds of their turnover is obtained from ordinary business and only one-third from N.H.S.' The Committee, therefore, concluded: 'There is no satisfactory alternative to the present system of supplying National Health Service medicines through the established retail channels. If purchase and distribution of medicines were undertaken centrally or through Health Centres costs would increase.'"²

In our view it is in Canada's interest to make more effective and fuller use of professionally trained pharmacists and that this objective can be achieved by encouraging the development of high-volume dispensaries.

¹ *Ibid.*, p. 408.

² Statement by the Dean of the Faculty of Pharmacy, University of Toronto respecting certain opinions of the Faculty concerning Pharmaceutical Services under a Comprehensive Medical Care Plan, submitted to the Royal Commission on Health Services, Toronto, May 1962, pp. 2 and 3.

Another problem facing the retail pharmacist is the lack of standardization in marketing drugs in pre-packaged form leading to higher costs for the consumer and possible losses on the part of the pharmacist in cases where he is required to break large lots into smaller doses and where he cannot return the unused balance to the drug manufacturer once the drug has lost its therapeutical effectiveness. On this point the Select Committee of the Ontario Legislature suggested: "That a more rational standardization of packaging be considered. Pills to be packaged in standard quantities and liquids in standard size bottles to permit the medical practitioner to prescribe according to the size of the package available and thus reduce the cost to the patient and any loss to the pharmacist which may ensue due to splitting packages".¹

While the matter of standardization is generally one to be resolved between the drug manufacturer and the drug retailer, good common sense suggests that efforts should be made by these two groups to achieve increasing standardization in packaging and marketing of drugs to make it possible for the industry as a whole to pass on the resulting economic benefits to the consumer.

Foreign Control of the Industry

The Green Book refers to an address by John T. Connor, President of Merck & Co. Inc. on March 17th, 1960 which indicated that in 1959 the ten drug companies in the United States having the largest sales in order were: Lilly, Upjohn, Smith Kline & French, Cyanamid, Parke-Davis, Wyeth, Merck, Squibb, Abbott, and Pfizer.² These firms all have branches or subsidiaries in Canada. These 10 plus Frosst which is a Canadian company, and Horner and Ayerst which though originally Canadian companies are now also American subsidiaries, are the 13 largest firms in the ethical drug field in Canada (Connaught Medical Research Laboratories is not included since, though competing with commercial firms in some areas it is a non-profit organization). All 13 companies have annual sales in excess of \$4 million each and are the only ethical drug firms in Canada having sales of this magnitude.

The Clarkson Survey for the year 1960 covered 40 firms which reported sales of human pharmaceuticals amounting to \$108 million in value and representing the bulk of all ethical drugs sold in Canada. According to the Department of National Health and Welfare, of these 40, only 4 appeared to be Canadian-owned and controlled. The remainder are branches or subsidiaries of 28 American and 8 European companies.³

¹ Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 51.

² Green Book, *op. cit.*, p. 240.

³ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

One of the consequences of the foreign domination of the Canadian drug manufacturing industry and at the same time a further measure of the degree of such dominance, is the extent to which drug patents are held by foreign firms. To answer a question in the House of Commons, the Patent Office compiled information about patents granted and compulsory licences issued for 14 important pharmaceutical products. The return compiled by the Patent Office is reported in the House of Commons Debates for February 10, 1960.¹ The 14 products were: nystatin, tyrothricin, neomycin, dihydro-streptomycin, streptomycin, tetracycline, oxytetracycline, meprobamate, chlorpromazine, chlorothiazide, chlorotetracycline, erythromycin, chloramphenicol, and penicillin. There were 395 patents granted which related to these 14 products. Of the 395 patents only 9, that is less than 2.3 per cent, were held by genuine Canadian firms. There were only three such firms. In addition there were only two other Canadian companies holding licences under patents. These related to 3 drugs and were owned by American firms.²

The dominance of the Canadian industry by foreign firms has a number of consequences. One of these is that the Canadian market tends to be supplied by subsidiaries or branches of foreign firms with basic drugs which they obtain from parent or related companies. As the Green Book points out, the fact that Canadian branches and subsidiaries rely so heavily on foreign sources of supply makes it necessary to be careful in appraising the reported costs of such firms.³ A corporation operating a wholly-owned subsidiary company will normally try to manage the affairs of both the parent and subsidiary so as to maximize profits. Considerations of efficiency may result in certain operations being handled by one firm for the group. Considerations relating to tax or tariff advantage may make it desirable for the supplying firm to take a large mark-up in some cases while in other cases it may be to the advantage of the international organization for the supplying firm to sell to related firms at prime cost so that the related firms take most of the mark-up. As a result the price charged by a parent to a subsidiary in the drug industry may be an arranged price in the sense that it may not be the same price which the parent would charge an independent firm.⁴ The true costs may be further obscured where the product purchased by the Canadian subsidiary or affiliate is in an unfinished state and for which there is no outside market by which the price charged to the subsidiary might be tested.

¹ See p. 929.

² Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

³ Green Book, *op. cit.*, p. 240.

⁴ *Ibid.*

DOMESTIC PRODUCTION AND IMPORTS

The Report of the Restrictive Trade Practices Commission indicates that in 1960 imports of drugs represented 17.5 per cent of Canadian domestic supply (technically "disappearance"). This is a decline from 20.2 per cent in 1955. Import figures include not only some finished dosage forms of drugs but medicinal chemicals and semi-manufactured drugs for further processing. The apparent share of the market accounted for by imports does not reflect the competitive impact of such imports which is in fact less than the figures indicate.¹

Statistics available are inadequate to gauge effectively the extent to which the Canadian market is supplied by ethical drugs manufactured in Canada for several reasons. First, we would require a different compilation of import figures followed by appropriate analysis. Secondly, we would require an acceptable concept of what is meant by "manufactured" in the drug field and have figures compiled accordingly. We need more knowledge in this field if appropriate policy decisions are to be made and we make recommendation to undertake studies.²

In the representations made to us by the Canadian Pharmaceutical Association a useful breakdown of the manufacturing process in the ethical drug industry was suggested. First, there is the extraction or synthesis of the medicinal chemical. Second, there is the purification of the crude drug still in bulk forms. Third, there is the fabrication of the individual dosage forms, which may or may not include the compounding of several active ingredients. Finally, there are the packaging and labelling procedures though these are not considered by the Association to be part of the real manufacturing process.³ In the Clarkson Survey in 1960, 81.5 per cent of the total sales volume was said to be manufactured and packaged in Canada, 11.8 per cent was said to be made outside Canada but packaged here, while 6.7 per cent was manufactured and packaged in other countries.⁴ This analysis does not distinguish between manufacture defined to include the fabrication of dosage forms, and manufacture defined to include the earlier steps mentioned above.

The manufacturers of medicinal chemicals are primarily concerned with producing the active ingredients that go into the compounding of pharmaceutical preparations. The Canadian Pharmaceutical Manufacturers Association acknowledged that the majority of these active ingredients, which constitute the bulk drugs which the ethical drug manufacturers in Canada

¹ As a matter of interest, exports in 1960 represented only 3.6 per cent of domestic shipments, a decline from 4.2 per cent in 1955. Restrictive Trade Practices Commission, *op. cit.*, p. 44.

² See Chapter 2, Recommendation 81.

³ Transcript, *op. cit.*, May 25, 1962, Vol. 60, p. 11425.

⁴ Canadian Pharmaceutical Manufacturers Association, *op. cit.*, p. 24.

formulate or compound into dosage form, have to be imported. It is also acknowledged that in some cases the active ingredients could be taken by the patient direct, but they must be completed, manufactured and placed in the dosage form.¹

In the production of medicinal chemicals the necessary equipment is expensive. The Canadian Pharmaceutical Manufacturers Association indicates that a large volume is required to make the installation of such equipment economic, and in most cases, the Canadian market alone is not big enough to justify the necessary capital investment. International companies have so far generally preferred to supply Canada with the medicinal chemicals from the United States, the United Kingdom, etc., where they have assured access to markets larger than the Canadian.² At the present time, according to professor J. L. Summers of the University of Saskatchewan there is only one antibiotic being produced in Canada.³ Merck, which used to manufacture fine chemicals in Canada, closed its plant, it is said purely on economic grounds. Similarly, at the end of World War II, penicillin production by the fermentation process was being carried on in Canada but it was subsequently discontinued.⁴

ADVERTISING AND PROMOTION

Ethical drugs are a unique group of commodities in that they may be referred to in three distinctly different ways: First, by its chemical name, secondly, by its "proper" name, and thirdly, by its brand name. We have defined these terms in Chapter 9.

In practice neither chemical names nor proper names are widely used in prescriptions. The percentage of all prescriptions for which preparations selling under their proper names were available on the Canadian market, is estimated to have been between 35 and 50 per cent in 1960 and may have reached 62 per cent in 1962. However, the Restrictive Trade Practices Commission concluded that the percentage of prescriptions with respect to which proper name drugs could conveniently be dispensed may have been as low as 18 to 20 per cent.⁵ There are few drug supply firms in Canada offering drugs by generic name. It was presented to us that the main ones were Empire Laboratories Limited of Toronto, Jules R. Gilbert Limited of Toronto and Starkman Chemists Limited of Toronto.⁶ The Alberta Phar-

¹ Transcript, *op. cit.*, May 18, 1962, Vol. 56, p. 10595.

² *Ibid.*, p. 10649.

³ *Ibid.*, May 25, 1962, Vol. 60, p. 11426.

⁴ Canadian Pharmaceutical Association, Inc., *op. cit.*, p. 53.

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 436.

⁶ The Government of the Province of Alberta, brief submitted to the Royal Commission on Health Services, Edmonton, February 1962, p. 108.

maceutical Association conducted a survey of 40 representative stores in seven centres in Alberta to determine the relative popularity of brand names in a total of 3,491 prescriptions. Of these, 3,119 or 89.3 per cent were written for brand name products, 243 or 6.7 per cent were written using generic terminology, and 129 or 4 per cent were compounded in the pharmacy and some of these may have been prescribed by generic name.¹ At our hearings in February 1962, the Alberta Pharmaceutical Association indicated that physicians in Alberta were still prescribing brand names over generic names in the proportion of 15 to 1.² Similar results were disclosed by surveys conducted by Prescription Services Inc. and by Drug Merchandising.³

The Select Committee of the Ontario Legislature concluded in its Report: "Some generic names are longer and more cumbersome than trade names and there is a preference on the part of the physician to prescribe by the trade name, although the teaching practice in medical and pharmacy faculties tends to encourage the use of generic names . . . Price differences between drugs marketed under generic names and drugs marketed under trade names were significant in some instances".⁴

The Select Committee further observed: "Not all drugs lend themselves to sale by generic name due to compound preparations which are a combination of several drugs and do not usually have a generic name. This limits the number of manufacturers who market the product and restricts competition".⁵

Other things being equal, the wider use of proper or generic names in prescriptions would carry with it certain advantages. It would mean that any one of the several brand names⁶ might be used to fill a prescription thus opening up at least the possibility of price competition. If appropriate safeguards are taken with respect to purity or potency of medications, the increasing use of proper name drugs could greatly reduce the number of products a retail pharmacist is obliged to carry, making it possible to reduce operating costs leading to lower prices. The point has been made that brand names in some cases are simpler and hence easier to remember. But against this, it may not be necessary for the physician to learn the various brand names but only the less numerous generic names. There is evidence that similar spelling or pronunciation in brand names may lead to confusion and that the use of brand names of the rarer type drugs which do not provide information with respect to the contents of the drug are not as helpful to

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 423.

² Transcript, *op. cit.*, February 13, 1962, Vol. 23, p. 5231.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 431.

⁴ Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 24.

⁵ *Ibid.*, p. 49.

⁶ The brand name of a drug as such does not signify purity, potency, etc. The name must be followed by its authority: British Pharmacopoeia, United States Pharmacopoeia, British Pharmacopoeia Commission, National Formulary, etc. The brand name simply reflects the reputation of the manufacturer.

prescribing physicians as more descriptive drug names. When drugs are called by their proper names, assuming that the proper names have been carefully chosen, the relationship among the drugs is clear. Examples of properly named related drugs are quoted by the Restrictive Trade Practices Commission: tetracycline, oxytetracycline, hydrochloride, chlortetracycline, and dimethylchlortetracycline.¹

We are facing in Canada a number of difficulties in an effort to use increasingly proper name prescriptions. The main obstacle appears to be uncertainty about the purity or potency of drugs carrying only generic names. At the present time in the absence of any indication in a prescription using generic terminology, that the product of a generic manufacturer should be dispensed by the pharmacist, he is free to fill it with a brand name. A survey conducted by Drug Merchandising and published in July 1962 established that in 62 per cent of the cases where generic prescriptions were written, druggists in fact filled them with brand name products.² This in part explains the limited results achieved by an Act of the Province of Alberta which was proclaimed on April 5, 1962 which permitted druggists to substitute a generic for a brand name in a prescription unless substitution was specifically forbidden by the physician. Although only a short time elapsed between the passage of the Act and the time when witnesses appeared before us to speak on this point, the Canadian Pharmaceutical Association expressed the opinion that there had been no change whatever in the prescribing habits of 95 per cent of the physicians in Alberta.³ This opinion was shared by the Canadian Pharmaceutical Manufacturers Association who said that the Act had not made a measurable difference in the prescribing habits of physicians or dispensing habits of pharmacists.⁴

As suggested above, the wide use of brand or trade names plays an important part in modifying the competition which exists among drug firms. Product differentiation here is of much greater significance than it is in the case of those products which the consumer can choose for himself. In other circumstances, price can be used as an effective competitive weapon for winning sales from a highly-advertised rival product. This is not generally so in the drug industry. Instead of using one trade or brand name for its line of products, as for example a soup company does, a drug firm usually uses a different trade name for each particular drug. This is a selling practice which is unique to the drug industry. The main purpose is to displace the chemical or proper name.⁵ If this is done successfully and physicians generally adopt the trade name in writing their prescriptions, a rival product is un-

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 446.

² *Ibid.*, p. 432.

³ Transcript, *op. cit.*, May 25, 1962, Vol. 60, p. 11450.

⁴ *Ibid.*, May 18, 1962, Vol. 56, p. 10619.

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 489.

likely to make any headway using a price appeal. The only alternative is a promotional campaign to push another trade name, directed to medical practitioners.

In the 40 companies covered in the Clarkson Survey of 1960, a breakdown was provided of the selling expenses involved in medical promotion and detailing on the one hand, and direct selling expenses other than medical promotion and detailing on the other. This survey concerned total sales of human pharmaceuticals (that is, it did not include veterinarian pharmaceuticals or proprietary medicines) amounting to \$108 million. The breakdown is given hereunder:

<i>Medical Promotion and Detailing Expenses</i>		'000
Medical Exhibits	\$	206
Medical and Pharmaceutical Journals		2,030
Direct Mail		3,048
Samples		3,953
		<hr/> 9,237
Detail men—Salaries		6,640
Detail men—Travel and other Expenses		3,099
		<hr/> 9,739
Total Medical Promotion and Detailing Expenses		<hr/> 19,000
<i>Direct Selling Expenses</i>		
Donations		192
Sales Representatives		3,735
Expenses of Sales Representatives		1,743
Other Selling Expenses such as price lists, institutional advertising, displays for drug stores, etc.		6,882
		<hr/>
Total Direct Selling Expenses	\$	13,000

The cost of all medical promotion and detailing, and of direct selling expenses for the 40 companies therefore amounted to \$32 million, or approximately 30 per cent of total sales.¹

The medical profession has been quite specific as to the limited usefulness of promotional efforts on the part of the drug industry. For example in the Report of the Committee on Pharmacy of the Canadian

¹ Answers to Specific Questions received from the Royal Commission on Health Services and provided by Canadian Pharmaceutical Manufacturers Association, p. 5.

Medical Association to the Annual Meeting of the Association in June, 1960, the usefulness of direct mailing by drug distributors as a source of reliable information on the efficacy of drugs was questioned:

"142. The general situation with regard to drugs should be a matter of concern to this Association. New drugs are being introduced at a rate of more than one hundred per annum, and new combinations of drugs are being marketed in a way which creates confusion. Some of the new compounds represent real advances in therapeutics, while others have very little advantage over the older agents which they supplant so rapidly. When new agents are introduced at this rate there is no opportunity for sober evaluation of their merits or publication of the results of such studies before they are widely advertised to the profession. Nonetheless, the sale of most of these drugs is directly due to the fact that they are prescribed by doctors. Your Committee feels that there are two aspects to this problem. The first requires that the individual physician consider carefully the evidence upon which the claims for new drugs are based, and the actual advantage (or disadvantage) likely to be enjoyed by the patient for whom he contemplates prescribing them. The second has to do with the provision of greater facilities for clinical trials of new drugs and their publication by institutions capable of doing the work properly, possibly with the support of a pooled fund to which the pharmaceutical manufacturers would be willing to contribute.

"143. The cost of drugs has been a matter of much discussion in recent months. There is no doubt that the pharmaceutical houses have made many contributions in past years to our ability to alleviate illnesses which in the aggregate represent an almost incalculable economic and humanistic gain to our community. There is some evidence to suggest that the return which they are receiving on their original investment is excessive. Your Committee is not in possession of sufficient factual evidence to pass judgment on this question, but there is no doubt that it is a matter which should concern this Association greatly. Many of the advertising practices of the drug houses appear wasteful and unprofessional. This applies particularly to direct mail advertising to the doctors. This has reached the point where it is nothing more than a nuisance to its recipients and your Committee would recommend that representations be made to the Pharmaceutical Manufacturers Association that it should be discontinued, and the saving passed on to our patients".¹

In a letter addressed to the Canadian Pharmaceutical Manufacturers Association drawing the Association's attention to the "nuisance" effect of promotional drug literature, Dr. A. D. Kelly, General Secretary of the Canadian Medical Association, stated:

"You will observe that the matter requiring the attention of the Association relates to the apparent wastefulness and cost of direct-mail advertising. I know of no single item of relationship with our friends in manufacturing pharmacy which produces more irritation in the minds of doctors than the receipt of the voluminous mail which arrives every day. We have noted the recent practice of certain members of your Association to utilize parcel post to deliver large packages, and I assure you that the reaction is most unfavourable.

¹ Canadian Medical Association, "Report of the Committee on Pharmacy". Transactions of the Ninety-Third Annual Meeting, *Canadian Medical Association Journal*, Vol. 83, September 3, 1960, p. 505.

"I believe that I correctly portray the attitude of most doctors to the flood of direct mail advertising in the following summary:

- (a) It is so voluminous that only the most conscientious recipient opens each piece before consigning it all to the waste basket.
- (b) Most of it constitutes outstanding examples of the printer's and lithographer's art which conveys the impression of great expense and consequent wastefulness.
- (c) It appears so expensive that doctors feel that it may contribute materially to the cost of prescribed drugs to the patients.
- (d) It produces in the minds of many doctors an unfavourable image of the firm which sponsors it.

"I believe that it may be possible to adduce arguments to refute each of the impressions which I have listed, but I would urge that you do not undertake to do so. In sum, professional opinion is most unfavourable to direct mail as currently carried out, and I believe that the Canadian Pharmaceutical Manufacturers Association should recognize this and take steps among its member companies to curtail or eliminate it. We have noted encouraging signs that certain companies have voluntarily discontinued this medium and I believe that it will be held to their credit.

"I realize that it is difficult for an Association such as yours to influence decisions of autonomous and competitive member companies, but I believe that it will be worth the effort to correct the current situation. A successful outcome would, in my view, go a long way towards enhancing the "image" of Canadian pharmaceutical manufacturing in the minds of my colleagues. The C.M.A. stands ready to assist your endeavours and to announce to the profession the progress which you may make."¹

Evidence was presented to the Select Committee of the Ontario Legislature indicating that the average proportion of advertising and promotion costs contributed 29.2 per cent to the total and that the proportion was reported as high as 35 per cent by one manufacturer.² The Committee observed:

"These methods of promotion are admittedly costly, but manufacturers consider this expense essential and emphasize that they would gladly reduce expenditures on promotion if a more economical method of effecting sales could be devised.

"Some medical representatives felt that much of the large volume of direct mail literature distributed went unread and was simply discarded, but most agreed that samples were retained and used for the benefit of needy patients. On the whole, doctors expressed the view that the system of transmitting information on drugs from the manufacturer to the medical practitioner could be improved".³

The Advisory Committee on Medical Care to the Government of Saskatchewan came to the conclusion:

"We view much of the advertising and promotional activities as wasteful and extravagant. We are strongly of the opinion that unless drug manu-

¹ *Ibid.*, p. 553.

² Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 24.

³ *Ibid.*, p. 25.

facturers take the lead in a program sponsored by their own trade association to reduce voluntarily their large, extravagant and wasteful expenditures on promotion, it may very well be necessary to limit such expenditures by stipulating the size of expenditures on advertising and promotion (on proportional basis) which would be accepted for Income Tax purposes as a legitimate expense of doing business. Such a provision may seem discriminatory but may offer a workable and effective solution".¹

Even some representatives of the drug industry admit that amounts spent on advertising and promotion are excessive. The following evidence was given to the Restrictive Trade Practices Commission by the President of Nordic Biochemicals Limited:

"The CHAIRMAN: Mr. Antoft, in your brief you make a number of comments on advertising and promotion which seem to indicate that you don't just like the extent to which these things were carried on. I wonder if these comments have in your view—this is what I want you to answer—whether you think this is putting it too strongly, whether you feel the manufacturers have got into a kind of unfortunate rat race in having to have more and more detail men, more and more fancy advertising? Would that be putting your views too strongly?

"Mr. ANTOFT: I don't think that would be putting it too strongly. I deplore this. I think it has developed into a rat race. I hope our industry together with the medical association will some day, in the not too distant future, will be able to find the formula by which a serious manufacturer can get information across to the doctor without this tremendous wastage of everybody's materials and time and money. I think this is an area for the industry and for the medical profession to arrive at some solution or to get closer to a rational approach to this".²

Evidence was given to the Restrictive Trade Practices Commission that in the United States some 4,500 pieces of direct mail advertising are received by physicians on an average in the United States each year, and it was argued that the bulk of it cannot be read and is wasteful. The Canadian Pharmaceutical Manufacturers Association disputed these figures, at least so far as they apply to Canada, and stated that in Canada a physician receives on average only 1,761 pieces of literature from pharmaceutical houses annually.³ Even this number is so large as to make it practically impossible for every physician to read carefully all the literature he receives.

As far as detail men are concerned, the Canadian Pharmaceutical Manufacturers Association indicated that in 1962, 49 of the Association's member companies employed a total of 1,647 detail men and salesmen. Eight firms employed between 62 and 70 sales representatives each. Of the total it is estimated that about 1,500 spend all or part of their time calling

¹ *Final Report of the Advisory Planning Committee on Medical Care to the Government of Saskatchewan*, September 1962, Regina: Queen's Printer, 1962, p. 105.

² Restrictive Trade Practices Commission, *op. cit.*, p. 223.

³ *Ibid.*, p. 278.

on medical practitioners.¹ (The Clarkson Survey indicated that on the average 36 per cent of the time of detail men is spent in direct selling, that is in work other than detailing physicians, such as visiting pharmacists, hospitals and other duties.)² It is estimated that there are 17,900 medical practitioners in Canada.³ This means that there is one detail man for every 12 doctors practising medicine in Canada. It also means that the \$19 million spent on medical promotion and detailing alone, represents over \$1,060 for each doctor each year.⁴

The Canadian Pharmaceutical Manufacturers Association argues reasonably enough that the drug companies don't spend money unnecessarily.⁵ The Association drew support for this argument from a recent study conducted by International Surveys Limited of Montreal which determined where physicians first learned about the new products.⁶ Detail men were by far the most important source of such information. Direct mail was more important than any of the remaining sources. The Canadian Pharmaceutical Association alluded to the heart of the matter when it recognized that some promotion is wasteful, but argued that drug firm A must continue unless drug firm B also stops.⁷ In these circumstances the efforts of competing firms tend to cancel each other out and the result of increasing competition is simply to raise costs.

Again the evidence given to the Restrictive Trade Practices Commission by the President of the Nordic Biochemicals Limited is particularly relevant:

"When Nordic Biochemicals Limited was established in 1951, we approached our responsibilities with what appears in retrospect to be naive idealism. We assumed that all that was necessary to thrive and expand in the Canadian drug manufacturing industry was to offer the best possible product at a reasonable price, in the expectation that within a very short time we would be operating at capacity. It was thought that advertising could be held to simple announcements in one or two of the main medical journals, announcing that our products were available. No provisions for direct mail promotion, an army of detail men, or huge sampling programs were envisaged. While this philosophy was operative, the company teetered on the brink of disaster, but only with reluctance and by degrees did we accept the 'facts of life', and the company finally began to prosper. It was rapidly discovered that although doctors publicly deplore the mass of direct mail literature, a sales volume on practically any product could be created by advertising it by mail providing it is done persistently and massively. Detail men are an expensive method of securing sales, but without them, cobwebs grow on the order desk.

¹ Answers to Specific Questions received from the Royal Commission on Health Services and provided by Canadian Pharmaceutical Manufacturers Association, p. 3.

² *Ibid.*, p. 8.

³ Transcript, *op. cit.*, May 18, 1962, Vol. 56, p. 10612.

⁴ See also Chapter 17.

⁵ Transcript, *op. cit.*, p. 10610.

⁶ Canadian Pharmaceutical Manufacturers Association, *op. cit.*, p. 83.

⁷ Transcript, *op. cit.*, May 25, 1962, Vol. 60, p. 11435.

Thirdly, in order to detail, a representative must usually 'bribe' his way into the doctor's presence by the offer of free samples in generous volume. The drug house who neglects any one of these three sales methods invites its own decline . . .¹

A final important aspect of this subject is the fact that adequate pharmacy distribution must parallel the promotional campaign to physicians. This means advertising and promotion directed to the pharmacist on a substantial scale. Otherwise when a prescription is written for a particular product, if the prescribed drug is not stocked locally, both the physician and the druggist are likely to be dissatisfied with the services provided by the drug company involved.²

We conclude: The evidence submitted to us confirms that a good deal of promotional effort in the drug industry is wasteful. Still, this state of affairs is likely to continue as long as the leading drug manufacturers and distributors fear that a reduction on their part of unnecessary promotional expenditures would mean a loss of business to a competitor who continues with such wasteful expenditures. Hence, the solution to the problem is to encourage *all* drug manufacturers and distributors to reduce promotional and advertising expenditures to more reasonable levels and we submit recommendation to this effect in Chapter 2.³

RESEARCH AND DEVELOPMENT

In some countries including the United States commercial drug firms have been responsible for significant medical research. There is more controversy over what proportion of the research they do is relevant to progress in medicine since relatively few basically new products have been developed in the post-war period. Skilled chemists have successfully produced compounds closely related to known drugs and having comparable activity. We found that a good deal of the research done by commercial drug firms is directed towards what amounts almost to duplication of existing drugs, in effect inventing around other people's patents. Frequently the new products do not have important advantages over their predecessors and may have disadvantages. Of the 5,727 new pharmaceutical products introduced on a national scale in the United States between 1948 and 1959, 2,795 were simply mixtures of two or more active ingredients, 1,356 were already on the market in other administrative forms, 1,085 were new brand names for existing drugs and only 491 were new chemical entities.⁴

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 188.

² *Ibid.*, p. 227.

³ See Chapter 2, Recommendation 64.

⁴ *Ibid.*, p. 185.

It is unnecessary for our purposes, however, to resolve any issues over the proportion of the research activity of commercial drug firms which is significant for medical progress because in Canada it is clear that important research is not done by the drug companies. The Restrictive Trade Practices Commission reported upon a survey conducted by the Canadian Pharmaceutical Manufacturers Association covering the research activities of 22 Canadian drug companies in the years 1958 and 1959. Although other amounts were claimed as having been spent abroad by parent companies on behalf of Canadian subsidiaries, the 22 companies actually spent for research purposes in Canada \$2.2 million in 1958 and \$2.5 million in 1959.¹ The Canadian Pharmaceutical Manufacturers Association conducted a similar survey covering the year 1960. This survey embraced 37 companies which account for the bulk of ethical drugs sold in Canada. The total amount actually spent in research in Canada by these companies was \$3.3 million or 2.8 per cent of total sales. Again certain sums were claimed for research done elsewhere.

The Select Committee of the Ontario Legislature arrived at a slightly higher proportion than was presented to us by the Canadian Pharmaceutical Association. Still, the Committee concluded: "The consequences of research expenditures as a justification in the cost of prescription drugs has, in our estimation, been somewhat overstated. Not all firms undertake to do research and, in Canada, research is largely confined to two or three of the major manufacturing firms, institutions like Connaught and universities. Thus, a ratio is difficult to determine but the average spent on research, according to the report prepared by Mr. A. J. Little and attached as Appendix D (Schedule 3), is only 3.8%".²

Other measures of the significance of the drug research actually conducted in Canada by commercial drug firms are available. Attention may be directed to the relative importance of the contributions made by the agencies which provide funds for medical research. In the main those are the Federal Government through the National Research Council, the Defence Research Board, the Department of Veteran's Affairs, and the Department of National Health and Welfare; certain provincial governments; voluntary health agencies; private research foundations; commercial firms; universities and hospitals; and foreign sources.³ The relative importance of these agencies as sources of funds is available for the fiscal year 1955-1956, when the Federal Government provided \$4,455,000 or 48 per cent of the total; provincial governments \$345,000 or 4 per cent; voluntary bodies \$845,000 or 9 per cent; commercial firms \$1,600,000 or 17 per cent; universities (from local

¹ *Ibid.*, p. 74.

² Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 40.

³ Green Book, *op. cit.*, p. 120.

funds) \$1,350,000 or 15 per cent; and foreign agencies \$595,000 or 6 per cent of the total.¹

Opinions about the amount of research and development work conducted by the ethical drug companies in Canada have been expressed by a number of qualified observers. The brief of the Faculty of Pharmacy of the University of Toronto indicated disappointment at the lack of support for the Faculty's research programme by the pharmaceutical manufacturing industry. Only one company had provided any scholarship or research grants for pharmaceutical research in the University of Toronto.² This one company had established an annual \$1,500 scholarship for five years commencing in 1958. The Committee for the Furtherance of Creative Research in the Pharmaceutical and Allied Industries which represents 27 Canadian drug companies while proposing measures to change the situation, flatly told us that "very little research is done in Canada in drugs".³ Dr. L. B. Pett, Principal Medical Officer for Research Development, Department of National Health and Welfare, expressed the opinion that the research carried on by commercial drug firms would form a minor part of total medical research in Canada, and that the chief centres of research were first the medical faculties of the universities, second the teaching hospitals, and third a few special research institutions like the Banting and Best Medical Research Institute and the Charles H. Best Institute in Toronto.⁴ The Restrictive Trade Practices Commission concluded that:

- "1. Canadian patents on drugs are secured to an overwhelming extent by patentees resident in foreign countries. Research in the drug field carried on by large drug companies on this continent is done largely in the United States . . .
- "2. In the foreseeable future it seems very unlikely that the Canadian subsidiaries of American parent companies will establish important research facilities in Canada . . . Although expenditures on research by Canadian subsidiaries of American companies have increased in recent years, this has been due largely to recent regulations of the Food and Drug Directorate which require an increasing amount of clinical testing of new drugs in Canada prior to approval by the Directorate.
- "3. The main Canadian research contributions that have been made in the field of drugs have resulted almost entirely from non-commercial activities at places like the Connaught Laboratories".⁵

In the light of what has already been said we do not think there can be any real dispute about the fact that the research conducted in Canada

¹ *Ibid.*, p. 124.

² The University of Toronto also does some research work for the Connaught Medical Research Laboratories.

³ Transcript, *op. cit.*, June 2, 1962, Vol. 66, p. 12567.

⁴ Restrictive Trade Practices Commission, *op. cit.*, p. 72.

⁵ *Ibid.*, pp. 519-520.

attributable to the commercial drug firms has been modest. If further confirmation of this is required it appears to us to be amply provided by the statements which many of the companies themselves made to inquiries by the Director of Investigation and Research, Combines Investigation Act. Returns of information were made to the Director in May and June 1960. Some of these read in part as follows:

Ames Company of Canada Ltd.

"... the Company did not directly expend any amounts for research during 1959."¹

Cyanamid of Canada Limited

"No research programme is carried on by the Company in Canada."²

Dymond Drugs Ltd.

"This company does no research."³

Eli Lilly and Company (Canada) Limited

"There is no research programme conducted in Canada except that we have many doctors co-operating in the assessment of new drugs through a clinical trial programme."⁴

G. D. Searle & Co. of Canada Limited

"... there are no grants made at present by the Canadian company, although it is possible some awards are made by the parent company which are not charged to this operation."⁵

Parke-Davis & Company, Ltd.

"Subject company does not itself carry on directly any research programs in Canada, nor make direct expenditures or grants therefor."⁶

Hoffman-La Roche Limited

"In the Roche world wide organization, basic chemical and pharmacological research is conducted at three main centres: Switzerland, United States and England."⁷

Poulenc Limitée

"Nous n'avons aucun programme de recherches proprement dites au Canada, si on entend à ce propos des recherches ayant pour but de découvrir de nouveaux médicaments."⁸

Ciba Company Limited

"The Company contributes to the Research activities of its parent Company, such contributions being calculated as a percentage of sales."⁹

Abbott Laboratories Limited

"All research is done by our parent Company in the U.S."¹⁰

Pfizer Canada

"Pfizer Canada did not itself carry on any research."¹¹

Burroughs Wellcome & Co. (Canada) Ltd.

"No research programme was carried out in Canada."¹²

Winthrop Laboratories of Canada Ltd.

"... no basic research is done in Canada."¹³

¹ Green Book, *op. cit.*, p. 127.

² *Ibid.*, p. 128.

³ *Ibid.*, p. 132.

⁴ *Ibid.*, p. 133.

⁵ *Ibid.*, p. 134.

⁶ *Ibid.*, p. 135.

These particular companies have been quoted simply to show what appears to be a widespread condition with respect to the research being done by the drug manufacturing industry in Canada. Some of these companies do carry on clinical testing programmes which have not been mentioned. In addition there are a few companies which undertake research programmes on a more substantial scale.¹

The Select Committee of the Ontario Legislature commented in its Report: "The firms conducting research programmes alleged that research is vital in order to enable them to compete with other firms, and such research programmes are ostensibly costly. There are elements of risk involved in research since not all research efforts are fruitful and frequently a better drug may be produced by another firm; but the costs incurred are, of course, reflected in the price of the products".²

We agree with the claim that research is vital to progress in medicine and that research in the drug field carried out by commercial companies can yield beneficial results. This would be particularly true in countries like the United States and the United Kingdom where large amounts are spent on drug research by private industry. But this is not the case in Canada where expenditures on drug research by commercial companies are comparatively modest and where few significant results have so far been achieved. This state of affairs in Canada leads us to the conclusion that if the existence of patents on drugs contributes to a substantially higher level of drug prices than would exist in the absence of such patents, it is difficult to see with respect to the Canadian drug industry, that the patent system can be defended on the usual grounds that it is necessary to provide incentives for research.

The Canadian Federation of Agriculture suggested that since Canadian drug companies do not add much to the volume of research done in Canada, we have little or no stake on research grounds in perpetuating the present system of distribution. The Federation suggested further that it would be hard to conceive of a more expensive way to get research done.³ Extended, the argument would be that if the patent system costs the Canadian public in the form of higher drug prices, anything more than say three million dollars, it is a bad bargain because the drug companies add less than this amount to the research done in Canada. It appears that Canada, a small country where most of the significant pharmaceutical research is done by other than the drug companies, has copied an institutional arrangement which can only be appropriate to a country like the United States where the higher prices which the patent system permits, in fact supports research by the industry on a substantial scale. It is with these considerations in mind that

¹ See also Chapter 17.

² Report of the Select Committee of the Ontario Legislature, *op. cit.*, p. 40.

³ The Canadian Federation of Agriculture, brief submitted to the Royal Commission on Health Services, Ottawa, March 19, 1962, Appendix C.

we have made suggestions with respect to changes affecting patents and trademarks of pharmaceuticals in Chapter 2.¹

Our experience has been that the development of drug research in Canada has relied heavily on public support and this situation is likely to continue. In fact we feel strongly that a good deal more research work should be done in Canada in the basic sciences as well as in the applied field to enable Canadians to obtain the benefits that accrue from systematic and advanced drug research.

Considering Canada's resources, we should concentrate our drug research in special fields where Canadian scientists and research scholars have particular proficiencies. In this area our scientists should be able to have access to adequate facilities and funds so that they can do their work effectively and unhampered by commercial considerations.

To achieve this objective it will be necessary to develop a long-term and co-ordinated programme of drug research in Canada with the Federal Government providing a substantial share of the cost of this programme. The proposed Health Sciences Research Council would be the appropriate agency to undertake the task of planning and co-ordinating a drug research programme and distribution of the necessary funds.²

PHYSICIAN AND DRUG PRESCRIPTION

The great advances that have been made in the last two decades in the development of new drugs to which we have referred earlier have conferred many benefits on the physician and the patient alike. The physician was able to increase his productivity and with it his income. The patient was able to get well sooner, avoid more illnesses and get a higher quality of medical services.

But, the great advances made in drug research and their application to the health sciences have created new problems for the medical profession. An increasing number of physicians with busy practices have found it difficult to keep up fully and currently with the therapeutic qualities of the mounting flow of new drugs, many of which were really not new but consisted of different combinations of ingredients producing similar therapeutic effects or similar ingredients marketed under different trade names. Pharmaceutical knowledge acquired by physicians at medical schools has tended to become obsolete rather quickly in the last two decades.

In the absence of an up-to-date Canadian Formulary and an authoritative current drug information service, physicians had to rely increasingly on the advertising and promotional literature supplied to them by drug manu-

¹ See Chapter 2, Recommendations 66-70.

² See Chapter 2, Recommendation 80.

facturers which, because of commercial interests involved, often make conflicting claims. Many physicians endeavour to keep up-to-date with pharmaceutical advances by reading objective articles in professional journals, attending medical and scientific conferences, consulting specialists in the pharmaceutical fields, etc. The extent of such efforts depends on individual initiative, sense of responsibility and time available for study and search for new knowledge.

The problem facing the physicians in Canada was put in these terms by the Select Committee of the Ontario Legislature:

"... a number of opinions were expressed that one of the main difficulties facing doctors was the lack of impartial information dealing with drugs, and medical witnesses indicated that they would welcome an independent source giving practical and unbiased guidance on new drugs. Some medical men regarded with suspicion information emanating from the manufacturers as being possibly exaggerated and biased".¹

Many physicians who endeavour conscientiously to keep up with medical advances and efficacy of new drugs coming on the market find it difficult to learn more about the costs of drugs in cases where alternative pharmaceuticals can be used to achieve the same therapeutic result.

Most physicians realize that proper name drugs of the same or similar therapeutic qualities may be considerably cheaper than brand name drugs' prescriptions. But, because of the confidence they have in the integrity of certain manufacturers, physicians are inclined to prescribe frequently drugs distributed by these firms rather than take what they might consider a "chance" with generic type drugs of uncertain quality. In some cases where two brand name drugs of identical therapeutical value are available, the physician may prescribe the product of the drug supplier that he is more familiar with even though this may be the higher priced product of the two.

We are in sympathy with the plight of the practising physician who, in many cases, is overworked in looking after patients and overwhelmed by the persuasive efforts of drug manufacturers and their detail men. How can he, without some help and a systematic effort, keep up continuously with advances in medical science, new and improved drugs coming on the market and the question of costs of drugs?

The physician's first obligation is to his patient. He wants to select the best drugs he can find to get his patient well as soon as possible. Efficacy and quality of drugs are his primary considerations. Costs of drugs may be a distant secondary matter. But, when a comprehensive drug programme is undertaken in Canada, costs of such a programme will assume greater importance than they have in the past. As explained in Chapter 2, we suggest that the cost of a drug programme be paid in part by contribution of the patient and in part out of general revenue. It is our concern

¹ Report of the Select Committee of the Ontario Legislature, *op. cit.*, pp. 19-20.

for both the taxpayer and the consumer that prompts us to emphasize the need for economy and the necessity to assist the medical profession to tackle more effectively the problems it faces in making the most judicious and beneficial use of pharmaceuticals in the best interest of their patients.

Here are some of the problems which the medical profession faces as observed in the United States:

"The life-span of the average new drug is said to be 2-5 years. The turnover has been running at a pace to overwhelm the competence of the average practitioner. In most cases his chief source of information comes from the promotional activities of the drug houses. If the druggist no longer fabricates prescriptions, it is because the average doctor no longer writes them; he prescribes prefabricated compounds, and he prescribes them by a brand rather than the generic name.

"... The pressure to 'educate' the doctor regarding the attributes of new products is vigorous and relentless. Evidence at the 1959-60 Senate antitrust hearings on the drug industry indicated that it spends about a fourth of the sales dollars on promotion—about \$4,000 a year per doctor." ... "Some 15,000 'detail men' or sales representatives visit doctors continuously—about one for every 10 physicians in private practice.

"A new product is often introduced with a 'blitz' and as many as 10 million pieces of mail have been used to launch a single product. According to Dr. William Bean of Iowa State University's School of Medicine: 'The richest earnings occur when a new variety of drug is ... released.' ... According to Dr. Solomon Garb of Albany Medical College, drug advertising is clearly exerting unprecedented influence on the physicians' prescribing, much of it unfavorable.' In support of his contention, he cites five other medical educators."¹

Similar problems have been encountered in the United Kingdom. The Hinchliffe Committee appointed in 1957 by the Minister of Health to investigate factors contributing to the high cost of drugs made a number of recommendations including:

1. that medical schools expand their courses on the economics of prescribing;
2. need for systematic post-graduate instruction of general practitioners in pharmacology and therapeutics;
3. that physicians prescribe by generic rather than brand name; and
4. that appropriate professional bodies be asked to take responsibility for a new journal for the medical profession to distribute up-to-date information about new drugs and preparations and the results of clinical trials.²

In the United States numerous proposals have been made to cope with some of the problems which we have outlined above. They include:

¹ Somers, Herman M., and Somers, Anne R., *Doctors, Patients, and Health Insurance*, The Brookings Institution, Washington, D.C., May 1961, pp. 96-97.

² Final Report of the Committee on *Cost of Prescribing*, Ministry of Health, London: Her Majesty's Stationery Office, 1959, pp. 6 and 41-48.

(1) rigorous and systematic drug evaluation by the industry itself, the medical profession, and/or medical schools; (2) education of physicians with respect to the drug industry and its products; (3) emphasis on formularies and prescription by generic name; and (4) strengthening of the Federal Drug Administration in the exercise of its existing authority and the expansion of authority to include: (a) unified and continuing regulation of drug advertising and promotion, (b) evaluation on the basis of efficacy as well as safety, and (c) continuous inspection of drug manufacturing on the premises.¹

As far as conditions in Canada are concerned we believe it to be important in the interest of good medical practice to leave the judgment as to what drugs may be prescribed in a particular illness to the practising physician and where necessary in consultation with professional experts, particularly in the pharmaceutical field. At the same time it will be necessary for the medical profession to do all it can to keep up with the fast moving developments in the drug field including understanding of some of the economic questions involved. To achieve this objective it may be necessary to take the following five measures:

1. To strengthen the courses in pharmacology taken by medical students to include among other things instruction in the economics of prescribing including an examination of comparative costs of drugs with similar therapeutical quality and efficacy.
2. To provide short refresher courses dealing with pharmacology for practising physicians.
3. To encourage the medical and pharmacy schools to do more extension work with physicians in the field of drug evaluation, therapeutics, etc.
4. To provide professional aids to enable physicians to keep up with new developments in the drug field including a Canadian Formulary and a periodic up-to-date drug information service.
5. To provide machinery comprising representatives from the medical and pharmaceutical professions and agencies concerned with the administration of a drug plan to minimize cost of prescriptions either in terms of over prescribing or in terms of prescribing high priced drugs where lower priced drugs would serve the same purpose adequately in the best judgment of the medical profession.²

¹ Somers, Herman M., Somers, Anne R., *op. cit.*, p. 101.

² The Advisory Planning Committee on Medical Care, in making its report to the Government of Saskatchewan, came to a similar conclusion and we quote: "We also consider it important to suggest that any method of cost-sharing with patients should be combined with a system of rules relating to the length or duration of drug therapy to be prescribed on new prescriptions, and to the number of times the prescription may be repeated". (Final Report of the Advisory Planning Committee on Medical Care to the Government of Saskatchewan, Regina: Saskatchewan, September 1962, p. 110). See also Chapter 2, Recommendation 60.

Drug Costs and Prices

This chapter deals with the economic and institutional aspects of costs and prices of drug prescriptions sold in Canada. We examine the reasons why Canadians pay as much as they do for drugs and we present the effect that certain legislative enactments have on drug costs and prices.

We analyse first the various items which enter in the cost of producing and distributing both domestic and imported drugs.

COMPONENTS OF PRICES AND COSTS

Manufacturing

The Canadian Pharmaceutical Manufacturers Association provided us with a breakdown of the main components of cost in the drug industry,¹ plus a comparison of the same components for all manufacturing industry. The figures for the drug industry are those from the Clarkson Survey covering 40 companies representing the bulk of the ethical drug industry, with net sales of \$126 million in 1960. For purposes of this analysis sales of veterinary pharmaceuticals, proprietary medicines, and other products were not subtracted from the total sales figures of the drug companies.

There are certain differences between these columns on which our analysis up to this point already throws some light. It will be noted that the cost of materials in the drug industry is substantially below that for all manufacturing in spite of the fact that packaging materials, which are important in the drug industry, are included in this cost component. While material costs are less, "other expenses" in the drug industry are very much more than they are in all manufacturing and this is not surprising since this item includes

¹ *Canadian Pharmaceutical Manufacturers Association*, brief submitted to the Royal Commission on Health Services, Toronto 1962, p. 37. The percentage distribution shown above is within a portion of a percentage point to the per cent distribution shown in the Report of the Select Committee of the Ontario Legislature on *The Cost of Drugs*, *op. cit.*, p. 44.

selling expenses not already accounted for in "wages and salaries" or elsewhere. It will be noted that depreciation is substantially less in the drug industry and this reflects the fact that there is little manufacture of medicinal chemicals, or other activity requiring expensive plant or equipment in the Canadian drug industry, which is mostly concerned with the preparation of dosage forms.¹

<u>Cost Component</u>	<u>Pharmaceutical Industry Percent</u>	<u>All Manufacturing Industry Percent</u>
Wages and Salaries	24.3	21.5
Employee Benefits	1.9	1.7
Materials (including packaging materials)	28.7	44.5
Excise and Sales Tax....	6.2	4.7
Other Expenses (including sell- ing expenses not already ac- counted for)	26.2	15.2
Depreciation	1.7	4.1
Taxes on Income	5.5	3.9
Profit	5.5	4.4
	<hr/> 100	<hr/> 100

Raw Materials

For the large ethical drug manufacturer in Canada, the cost of raw materials may involve the purchase of products ranging from the completely finished dosage form already packaged for sale to the bulk medicinal chemicals which need further refinement or formulating before being processed into dosage forms and packaged. It is necessary to be cautious about the importance to be attached to raw material costs. In some cases of course no further processing of any kind is required and the cost to the Canadian company of the "raw material" is significant. In other cases the difference is less meaningful. For instance, we were referred to the cost of water and its price when used for injection purposes. Water is probably the cheapest of all raw materials and it is estimated that the amount of tap water used in one injectible container costs only .000004 cents. The tap water of course must have inorganic impurities removed, it has to be sterilized to get rid of

¹ The evidence suggests that in approximate terms the average drug manufacturing company spends only about 40 per cent of what the average manufacturing firms spend on plant and equipment.

bacteria, the ampoules have to be tested in a dye bath for imperceptible cracks, etc. If the final package sells for 10 cents, which is said to be less than a profitable price for most companies, the price of the final package would be 2,500,000 times the cost of the raw material.¹

The cost to the Canadian company of acquiring a particular raw material may be a more or less arbitrary figure. As we have seen, most of the major Canadian drug companies are affiliated with companies in the United States or Europe, who supply the Canadian companies with their requirements of basic drugs. In most cases therefore the Canadian firm is not dealing at arm's length with its supplier, and as we have suggested earlier the price arranged between them may be arrived at with tax or tariff considerations in mind. This is particularly likely to be the case where the drug is in a semi-processed state, for which there is no outside market and hence no market price, or where the product when finished is a specialty item which is not sold by the parent company to anyone else at the same trade level as the Canadian subsidiary.

A few drugs may be imported into Canada duty-free but most are subject to duty. Single drugs of a class or kind made in Canada are generally dutiable at rates of 15 to 20 per cent of "fair market value". Single drugs of a class or kind not made in Canada are free of duty under the British Preferential Tariff but dutiable at 15 per cent under the Most Favoured Nation schedule. Combinations and mixtures of drugs are generally dutiable at rates ranging from 17.5 per cent to 25 per cent of "fair market value". The amount of duty paid by importers of drugs is approximately \$3 million per year.² It should be pointed out that the dumping provisions which may be invoked when goods are imported at less than "fair market value" in country of origin tend to encourage American parent companies, for example, to charge their Canadian subsidiaries a price not lower than the best price they offer in the United States. In many cases this best price would not involve a sale to another manufacturer but would rather reflect the supply of the product to a lower level of trade.

Cost of Quality Control

There are some cost components to which a great deal of importance is attached by the drug companies, which are hidden in the breakdown set out at the beginning of this section. One of these is the component commonly referred to as quality control. It is necessary to examine the significance of this component because uncertainty among physicians about the quality of

¹ Answers to Specific Questions received from the Royal Commission on Health Services, 1962, and provided by the Canadian Pharmaceutical Manufacturers Association, p. 2.

² Department of National Health and Welfare, Research and Statistics Division, *Report on the Provision, Distribution, and Cost of Drugs in Canada*, January 1963.

generic drugs appears to be one of the main factors limiting the competitive impact which they have in the Canadian market. The Director of Investigation and Research under the Combines Investigation Act calculated that the average expenditure on quality control for 27 Canadian drug firms amounted to 1.21 cents for every dollar of sales. On the basis of information received from 22 of the 27 companies, the Director concluded that expenditures on quality control represented 3.62 per cent of the cost of goods sold. The survey conducted on behalf of the Canadian Pharmaceutical Manufacturers Association included information on quality control expenses in 1960 for 35 drug companies. The figures obtained included amounts spent in Canada for quality control and amounts charged by parent or affiliated companies outside Canada for the operation of quality-control laboratories and to cover the costs of testing in outside laboratories, but did not include the cost of inspection staff and some other items. However, the expenditures as described for the 35 companies amounted to 4.2 per cent of total production cost.¹ There are obvious difficulties in the way of distinguishing a separate quality-control component from the general costs of manufacturing. In addition, where subsidiaries of foreign firms import prepared dosage forms of certain drugs, further expenditure in Canada for quality control will be negligible. We cannot accept the suggestion that the "large" expenditures made on quality control in Canada justify the assertion that only the major ethical drug companies are in a position to supply drugs of adequate quality.

Research and Development Costs

Another cost component which has been discussed a great deal in relation to the drug industry is the expense occasioned by research and development. We refer here once again to the Clarkson Survey conducted on behalf of the Canadian Pharmaceutical Manufacturers Association in which research expenditures covering 1960 were calculated for 35 companies. With total net sales of \$115 million these 35 companies spent a total on research and development of \$9,551,000 or 8.3 per cent of sales. As noted earlier, the companies actually spent only \$3,349,000 in Canada. The other \$6,202,000 was charged to the Canadian subsidiaries for research done elsewhere.² This is obviously a quite exceptional situation. In most industries foreign companies tend to supply their Canadian subsidiaries with know-how (including the results of research) and with capital, and to take the earnings of the Canadian subsidiaries as the return on their investment. In the drug

¹ Restrictive Trade Practices Commission, *Report Concerning the Manufacture, Distribution and Sale of Drugs*, Ottawa: Queen's Printer, 1963, p. 152.

² *Ibid.*, p. 75.

industry it is evident that foreign parent companies prefer to be separately compensated for supplying Canadian subsidiaries with know-how on the one hand and with capital on the other.

Sales Promotion

As indicated in Chapter 16, sales promotion in the drug industry is very expensive. In the cost breakdown given at the beginning of this chapter, selling costs appear to be divided principally between the "wages and salaries" component and the "other expenses" component. Turning once more to the Clarkson Survey that covered total sales of human pharmaceuticals by 40 companies in 1960 we find that medical promotion accounted for 8.6 per cent of the sales dollar, detailing accounted for 9 per cent of the sales dollar and direct selling accounted for 11.6 per cent of the sales dollar. Thus the total costs of sales promotion in the drug industry amount to 29.2 per cent of every dollar of sales.¹ In this breakdown medical promotion includes the cost of samples which alone accounts for 3.7 per cent of the sales dollar.² In connection with the cost of samples it is of interest to note that the dumping provisions of the customs tariff mean that goods which are imported to be distributed as free samples must be paid for by the Canadian company at their "fair market value" thus increasing the sales expense of the Canadian company.³

Profits

With respect to the profit component we sympathize with the comment made by Professor Brian Dixon of Queen's University in a study prepared for the Canadian Pharmaceutical Manufacturers Association that "the presence of a preponderance of joint costs, which are inseparable as far as individual products are concerned, makes any attempt at individual product cost pricing pointless and purely arbitrary. Any attempt to either justify or criticize individual prices on a cost basis under such circumstances is pointless, and invalid. The only course open for the firm, and the only test as to the over-all pricing policies, is to examine the pricing of the full line".⁴ Unfortunately, for reasons to which we have earlier alluded and which are treated more fully below, the earnings of the Canadian drug industry are not a satisfactory test of the over-all pricing policies of the industry because they are understated. This does not mean that they are relatively low. On the con-

¹ Answers to Specific Questions, *op. cit.*, p. 5.

² *Ibid.*, p. 9.

³ Green Book, *op. cit.*, p. 29.

⁴ Dixon, Brian, *An Economic Analysis of the Pharmaceutical Manufacturing Industry in Canada*, submitted to Stanley N. Conder, Canadian Pharmaceutical Manufacturers Association, Kingston, September 15, 1960, p. 30.

trary, in the period 1953 to 1960 inclusive, for the whole pharmaceutical industry (that is including the loss companies as well as the profit companies) the rate of return on investment was on the average 81 per cent higher than for all manufacturing. It was in fact 19.82 per cent in the drug industry as compared with 10.95 per cent in all manufacturing.¹

The Restrictive Trade Practices Commission referred to the effect of the dumping duty in bringing the cost to the importer up to the fair market value in country of origin and indicated it agreed with the statement made by the Director in the Green Book that:

"... To the degree that the price charged by a foreign parent company to a Canadian subsidiary approaches the trade price in the country of origin, profit is taken by the parent rather than by the subsidiary. In an extreme case, such as that referred to in the letter quoted in Chapter III [p. 29] above, the Canadian subsidiary may sell at a loss, but it is obvious that the regular profit on the particular product had already been taken by the parent company. This means that profits of Canadian subsidiaries are not an accurate indication of the actual profit resulting from the sale of imported drugs; they reflect the earnings of the Canadian subsidiary only and do not reflect any profit previously taken by the parent company'".²

Support for the view that profits tend to be taken by the parent company rather than by the Canadian subsidiary may be found in other figures published by the Commission. For nine Canadian branches or subsidiaries of firms carrying on an ethical drug business in the United States, the average rate of profit (before income tax) to sales was 15.68 per cent as compared with 24.98 per cent for the parent companies in the United States.³ Although there are some factors in Canada making for higher costs, such as lesser population density and the requirement of two languages in sales promotion, the economies of the two countries are so similar that such disparities in earnings are not found in most other industries, even where the Canadian companies are much more extensively engaged in manufacturing than they are in the drug industry.

We asked the Canadian Pharmaceutical Manufacturers Association if it agreed that the profits of Canadian subsidiaries are an inaccurate indication of the actual profit resulting from the sale of imported drugs because they reflect the earnings of the Canadian subsidiary only and do not reflect any profit previously taken by the parent company. The Canadian Pharmaceutical Manufacturers Association in its answers to our specific questions, replied that its members do not have access to their parent companies' accounting records, that they are, however, subject to Canadian customs

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 376.

² *Ibid.*, p. 178.

³ *Ibid.*, p. 362.

regulations and to scrutiny by Canadian income tax authorities, and that the parent-subsidiary relationships in the pharmaceutical manufacturing industry are no different from those which exist in other industries. The last part of this reply, however, overlooks a number of important points. In the drug industry there is frequently no independent market by which the price arranged between the Canadian subsidiary and the foreign parent can be tested either because the product in question is a semi-processed one or because it is an exclusive or specialty item which is not sold to other manufacturers. At this point we should also mention again the quite unparalleled payments for research or know-how made by the Canadian subsidiaries to the foreign parent companies. In his evidence before the Restrictive Trade Practices Commission, Mr. R. B. Thompson, Manager of the Medical Products Department of Cyanamid of Canada said:

“Mr. THOMPSON: Well, Mr. MacLeod, the price that we pay to our parent company, have been paying, is more than just a basic cost for the bulk crude material.

Mr. MacLEOD: Yes.

Mr. THOMPSON: It includes—it is one of the ways in which we contribute to the research programme in our parent company. The methods by which this kind of relationship takes form are changing in the industry and we are perhaps a good example of that because we will cease—we have already discontinued the importation of materials which you have described and we will now produce it in Canada. We also are now in the process and in fact have been negotiating an agreement on research and development, an agreement between Cyanamid of Canada and our parent organization, so that there will be a separate fee charged for research and development which in the past has been transmitted to the parent company through the medium of raw material purchased, not just tetracyclines, but of other things’”.¹

Allowing for the understatement of profits made in the drug industry referred to above, we conclude that profits of pharmaceutical companies in Canada appear to be running at at least twice the level of the manufacturing industry as a whole.² We have no objection to profit levels *per se*, believing as we do in the virtues of a basically free enterprise society. But we are concerned here with the objective of facilitating the effective working of market forces in the drug industry which could bring benefits to the Canadian consumer in the form of lower drug prices through increased competition and through the avoidance of wasteful and unnecessary expenditures.

¹ *Ibid.*, pp. 331-332.

² This may be an understatement because the profits reported by the pharmaceutical companies are 81 per cent higher than manufacturing as a whole, without allowing for the understatement of profits in the drug industry. A measure of this understatement may exist in the fact that the profits of the American companies referred to on page 680 were two-thirds higher than those of their Canadian subsidiaries.

Federal Sales Tax on Drugs

Finally a word should be said about the tax component in the breakdown presented at the beginning of this section. Except for five specific drugs, all drug preparations are subject to federal sales tax at the regular rate of 11 per cent. However, no sales tax is payable by hospitals if the drug is not resold for profit. As a result virtually all drugs sold to hospitals are now free of federal sales tax. Prescribed drugs are generally exempt from provincial taxes on retail sales.¹ The federal sales tax applies whether the drug is manufactured in Canada or whether it is imported. In the case of the drug manufactured in Canada the tax is calculated on the selling price. In the case of the drug imported, the tax is calculated on the duty paid value. Because the manufacturer's price is of course only about 50 per cent of the retail selling price, the sales tax represents nearer 5 per cent than 11 per cent of the retail price.²

A number of briefs submitted to us dealing with drugs made the point that the removal of the 11 per cent federal sales tax on drugs could be an important factor in reducing the costs and prices of pharmaceuticals and we were urged to make such a recommendation. We conclude that there is considerable merit in reviewing the question of whether drugs other than those sold to hospitals should remain subject to sales tax.³

Competition in the Drug Industry

As far as competition in the drug industry is concerned some companies offer quantity discounts, straight percentage discounts on orders above a certain size and special "deals" from time to time.⁴ In general, however, the Restrictive Trade Practices Commission concluded that price competition was not effective in the distribution of ethical drugs to the retail trade.⁵ Price competition is vigorous in certain sales to hospitals and government agencies. Apart from the fact that the federal sales tax does not generally apply on hospital sales, the Canadian Pharmaceutical Manufacturers Association explained that the primary difference between hospital and retail prices lay in the economics achieved by the drug companies in selling in bulk against selling in consumer-size packages through national distribution.⁶

This explanation is not quite adequate particularly in the light of the experience of hospitals in Saskatchewan. Evidence was given to us that prednisone, a cortisone preparation used in arthritic and asthmatic conditions,

¹ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

² Restrictive Trade Practices Commission, *op. cit.*, p. 180.

³ See Chapter 2, Recommendation 65.

⁴ Green Book, *op. cit.*, p. 87.

⁵ *Ibid.*, p. 512.

⁶ Answers to Specific Questions, *op. cit.*

sold for \$17 per hundred units to the retail pharmacist in Saskatchewan at the same time that it was being sold at \$1.95 per hundred to hospitals and government departments. The Saskatchewan Pharmaceutical Association said that the usual explanation given by manufacturers for such differentials is that the price to the hospital involves no promotional material, it is a single transaction for a large quantity, and it does not usually involve the preparation of small packages.¹ In fact, the basic explanation for the differential appears to be that the majority of Saskatchewan hospitals with pharmacists, use the tender system where it may be applied, to bring competitive forces into play. The Director of Pharmaceutical Services of the University Hospital in Saskatoon explained that the use of tenders presupposes two things: first, an active pharmacy and therapeutics committee which will give the pharmacist authority to buy one brand of drug and dispense that brand as equivalent to all brands called for on a prescription, and second, that firms requested to submit tenders do in fact sell drugs of equivalent quality.

The following are examples of minimum and maximum prices quoted on tenders to the University Hospital in Saskatoon. On a quantity of 5,000 tablets of a particular drug the lowest bid received was \$4.29 per 500 and the highest quotation was \$19 per 500. On a quantity of 1,000 units of another drug the lowest quotation was \$22.52 per 1,000 and the highest quotation was \$46.54 per 1,000.²

The University Hospital in Saskatoon has 4,000 drug items in its inventory which are bought from 75 to 100 suppliers. Yet the hospital finds it practical to call for tenders for less than 25 specific drugs. Less than 25 per cent of all drugs by dollar volume are bought by the hospital on tender. An additional 17 per cent of the hospital's total drug requirements, principally intravenous fluids, are bought on contract. It was the opinion of the Director of Pharmaceutical Services that tendering could not be increased much beyond this because hospitals are faced with the need to buy a multiplicity of drugs which are used in small quantities. In many cases the hospital requires only 50 or 100 tablets of a particular drug and for this there may be only one supplier.

Experience elsewhere confirms that of the Saskatchewan hospitals. While admitting that a large volume of drugs was involved, the Government of Alberta expressed the opinion that the low prices received by its hospitals resulted from recognition by drug manufacturers of the hospital's greater bargaining power when they were in a position to disregard brand names.³ Also the Ontario Department of Health is reported to have begun to make

¹ Transcript, *op. cit.*, January 24, 1962, Vol. 19, p. 4419.

² *Ibid.*, p. 4466.

³ *The Government of the Province of Alberta*, brief submitted to the Royal Commission on Health Services, Edmonton 1962, p. 101.

substantial savings in the purchase of tranquilizers and anti-tuberculosis drugs when it was able to bring in the competition of generic drug manufacturers by undertaking a testing programme.¹

It is possible to observe the impact of price competition in certain sales to hospitals in various parts of the country. The Restrictive Trade Practices Commission reported the following comparison of prices of certain drugs sold to retailers, hospitals, and the University Hospital in Edmonton in Alberta:²

Generic Name	Brand Name and Manufacturer	Price to Retail Pharmacist per 100	Price to Hospital per 100	Tender Price to University Hospital, Edmonton, per 100
		\$	\$	\$
Tetracycline (250 mg.)	Cosa-Tetracyn (Pfizer)	28.70	19.18	16.50 (20,000 lot)
	Tetrex (Bristol)	28.70	26.33	14.95 (20,000 lot)
	Muracine (Nadeau)	19.00	17.12	12.50 (\$2.00/16) (20,000 lot)
	Achromycin (Lederle)	25.88	23.27	21.81 (\$3.49/16) (20,000 lot)
Prednisone (5 mg.)	Meticorten (Schering)	13.62	7.00	1.62
Triamcinolone (4 mg.)	Aristocort (Lederle)	23.00	17.27	16.41
	Kenacort (Squibb)	23.04	18.65	18.65
Dexamethasone (.75 mg.)	Decadron (Merck)	17.88	14.50	11.50
	Deronil (Schering)	17.88	14.50	14.50
Methylprednisolone	Medrol (Upjohn)	23.01	—	10.73

¹ Report of the Select Committee of the Ontario Legislature on *The Cost of Drugs*, *op. cit.*, p. 65.

² Restrictive Trade Practices Commission, *op. cit.*, p. 314.

The University of Alberta Hospital received, in other tenders calling for 25,000 units of Prednisone, a low bid from Charles E. Frosst & Co. of \$1.20 per 100 units and a high bid from Parke, Davis & Co. of \$1.70 per 100; for 25,000 units of Phenylbutazone, a low bid from British Drug Houses (Canada) Limited of \$11.50 per 1,000 and a high bid from Intra Medical Products Limited of \$19.52 per 1,000; for 30,000 units of Hydrochlorthiazide, a low bid from Charles E. Frosst & Co. of \$7 per 1,000 and a high bid from Abbott Laboratories of \$22.50 per 1,000; for 20,000 units of Tetracycline a low bid from Nadeau Laboratories of \$12.50 per 100 and a high bid from Cyanamid of Canada of \$21.81 per 100; and for 10,000 units of Promazine HCL a low bid from Mowatt and Moore Limited of \$8.58 per 1,000 and a high bid from J. Wyeth & Brother (Canada) Limited of \$17.68 per 1,000.¹

With regard to Manitoba, we were given evidence by the Minister of Health of that province about recent calls for tenders by three mental hospitals which have established a group-buying programme. On one drug the low bid was \$140 and the high bid \$828; on another the low bid was \$220 and the high bid \$834; on a third drug the low bid was \$126 and the high bid \$405; and on a fourth drug the low bid was \$384 and the high bid \$1,128.²

Wholesaling

The Clarkson Survey covering the operations of pharmaceutical manufacturers in 1960 included an examination of trade discounts normally offered to different classes of customers. Such discounts are taken from list prices which in effect are suggested retail prices to the consumer. In the survey, 37 companies answered the questions about sales to wholesalers. The survey showed that it was the practice of three companies to allow to wholesalers a discount of less than 40 per cent; it was the practice of eight companies to allow a discount of exactly 40 per cent; it was the practice of 25 companies to allow a discount above 40 per cent and up to 50 per cent; and it was the practice of one company to allow a discount of over 50 per cent. This roughly confirms the Green Book finding that, although there was considerable variation, the most common practice was for drug manufacturers to allow wholesalers a discount of 40 per cent and 16½ per cent. (This is a combined discount from the retail list price of 50 per cent.) In these circumstances the wholesaler would ordinarily pass on the 40 per cent discount to his retail

¹ *The Government of the Province of Alberta, op. cit.*, Appendix B, Section A.

² *The Government of Manitoba*, brief submitted to the Royal Commission on Health Services, Winnipeg, January 1962, p. 48.

or hospital customer.¹ Wholesalers normally sell to hospitals at the same price less the federal sales tax, as they do to retailers. (The wholesaler of course subsequently recovers the tax which he has already paid.)²

On the basis of this evidence then, the standard wholesale margin is 10 per cent of the retail selling price or 16½ per cent of the wholesaler's selling price. Apparently the wholesale margin is narrowing. Drug Trading Company Limited, one of the large drug wholesalers in Ontario, which is a co-operative owned by retail druggists, grants rebates over and above regular discounts to its members. Other wholesalers in Ontario have had to offer concessions in order to remain competitive.³ According to the Canadian Pharmaceutical Association the formation of other buying co-operatives by pharmacists themselves has been responsible for tightening profit margins for wholesalers in many districts in Canada.⁴

It should be mentioned that certain drug manufacturers will sell only to wholesalers. Eli Lilly & Company (Canada) Limited is one such manufacturer. Retail druggists and hospitals which wish to buy products of the Eli Lilly Company must purchase them through wholesalers.⁵ At the other extreme are those drug manufacturers who do not give wholesalers any special recognition at all but allow the same discount to wholesalers as they do to retailers.⁶

Retailing

The normal trade discount allowed by manufacturers to both retailers and hospitals is 40 per cent off the suggested list or retail price. Some small suppliers allow the retailer a 50 per cent discount on ethical drugs rather than the more usual 40 per cent. Such firms frequently follow the policy of allowing the same 50 per cent to all customers, that is to wholesalers, hospitals, physicians, etc. In contrast most of the larger firms allow only 25 per cent off list to medical practitioners.⁷ Large quantities of drugs are distributed through wholesalers and on purchases from such sources druggists usually receive a smaller discount than they do from manufacturers.⁸ As indicated earlier, the Clarkson Survey of the operations of pharmaceutical manufacturers in 1960 included an examination of trade discounts. Of 37 companies surveyed, 31 reported upon their sales to druggists. Of the reporting com-

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 306.

² Green Book, *op. cit.*, p. 87.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 309.

⁴ *The Canadian Pharmaceutical Association, Inc.*, brief submitted to the Royal Commission on Health Services, Toronto, May 1962, p. 63.

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 308.

⁶ Green Book, *op. cit.*, p. 86.

⁷ *Ibid.*, p. 88.

⁸ Restrictive Trade Practices Commission, *op. cit.*, p. 396.

panies, 24 allowed discounts of exactly 40 per cent and seven allowed discounts of over 40 per cent and up to 50 per cent. In addition, certain companies indicated that they allowed volume discounts and special discounts on certain products from time to time. With respect to proprietary drugs, household remedies, and sundry drug products, the pattern of discounts varied widely but discounts of less than 40 per cent seemed to be usual.¹

In its brief to the Restrictive Trade Practices Commission the Canadian Pharmaceutical Association included the results of a survey, which it conducted in all provinces except Newfoundland, of the prices at which eight specific drug and sundry items could be purchased from manufacturers and wholesalers. The result of this survey showed considerable variation in the terms on which druggists purchased their supplies of drugs. The maximum difference in cost prices, expressed as a percentage of the lowest price, was 83.3 per cent. There was as much as 50 per cent variation in prices paid for different purchases from manufacturers and up to 39.2 per cent variation in prices on purchases from wholesalers.² As we shall see, the variation in costs to druggists is not reflected in their selling prices.

We explored the possibility that retail druggists generally might obtain better prices through bulk purchasing from manufacturers, but the retailers who appeared before us did not see much likelihood of this development. The Saskatchewan Pharmaceutical Association pointed out that a co-operative wholesaler gets the same price from manufacturers as other wholesalers, has comparable costs, and therefore cannot be expected to have substantial savings to pass on to member retailers. Bulk purchasing by smaller groups of retail druggists would not involve much in the way of a bargaining weapon. In any event, a bulk depot would have to meet the cost of repackaging drugs and the cost of shipping them to member stores. In addition such things as narcotic drugs cannot just be passed from druggist to druggist with informality, nor can a bulk depot handle them unless licensed as a wholesaler.³

Generally speaking, as we said earlier, drugs are exempt from provincial sales tax. In Ontario, Quebec and British Columbia drugs are exempt from provincial sales tax only when they are sold on prescription. In Saskatchewan and New Brunswick the exemption of drugs from the application of the provincial sales tax is a general one. Manitoba and Alberta do not impose a provincial sales tax.⁴

The policy of using the manufacturers' list price in determining the price to be charged on a prescription is almost universally followed by druggists in Canada. The most common trade discount allowed by manufacturers

¹ *Ibid.*, p. 306.

² *Ibid.*, p. 392.

³ Transcript, *op. cit.*, January 24, 1962, Vol. 19, p. 4421.

⁴ Restrictive Trade Practices Commission, *op. cit.*, p. 181.

is 40 per cent and this means an initial mark-up over cost by retail druggists of 66⅔ per cent. In addition a further charge is usually made for broken quantities, that is, where the prescription calls for a smaller quantity of the drug than is contained in the package supplied by the manufacturer. Beyond this a professional dispensing fee is usually added. The amount of this fee varies depending upon the particular formula used in its calculation. When dispensing expensive drugs, pharmacists sometimes forego the addition of the professional fee.¹ Provincial pharmaceutical associations in Canada publish pricing guides for the use of their members. These pricing guides usually contain two sets of retail prices—one to be used where the prepared dosage form is sold and one to be used where the pharmacist actually compounds the prescription. The pricing guides are especially convenient to the retail druggists where broken quantities of drugs are involved.

To illustrate: In the Province of Alberta when a drug is subject to the standard trade discount of 40 per cent, the established dispensing fee is 75¢ on unbroken quantities and \$1 on broken quantities. The dispensing fee is a flat charge which is applicable whether the drug costs the pharmacist 50¢ or \$10. The annual survey covering the year 1961 conducted by the Canadian Pharmaceutical Association disclosed that the average price of all prescriptions dispensed in Canada was \$3.14. If we apply the Alberta formula (and disregard for the moment broken quantities) it appears that manufacturers' suggested list prices must have averaged \$3.14 less 75¢ or \$2.39. If we assume that druggists bought at the standard trade discount of 40 per cent, the average cost to the druggist must have been \$1.43. The average price of \$3.14 therefore represents a mark-up over the standard cost to the druggist of slightly more than 119 per cent. To the extent that broken quantities were involved, the dispensing fee and the mark-up over cost would be correspondingly higher.² To the extent that druggists obtained trade discounts greater than 40 per cent, or to the extent that they were able to take advantage of special quantity discounts or other special prices from manufacturers, their costs would be lower than the standard cost used in this calculation and again the mark-up over cost would be correspondingly higher than 119 per cent.

Another pricing formula which has been used by retail druggists is to take the cost of ingredients and simply add a \$2 dispensing fee with no mark-up. This formula lowers the cost of high-priced drugs but increases the cost of low-priced drugs.³ While used by some pharmacists this formula has not received any important measure of acceptance, according to the Canadian

¹ *Ibid.*, p. 395.

² Transcript, *op. cit.*, February 13, 1962, Vol. 23, p. 5235.

³ *Ibid.*, p. 5237.

Pharmaceutical Association. Among the reasons given is the fact that the use of the manufacturer's suggested list price plus a professional fee up to 75¢ has been common practice for decades and the fact that druggists are reluctant to increase prices in the lower brackets.¹

There is evidence that about 80 to 85 per cent of all retail pharmacists in most provinces use the pricing guide which is endorsed by the local pharmaceutical association.² The Restrictive Trade Practices Commission concluded: "The general effect of the practices followed by retail pharmacists in pricing prescriptions is to produce uniform or closely similar prices for comparable prescriptions in the same area. Variations in prices are not excluded but they will not significantly affect the prevailing pattern of prices".³

The degree of uniformity may be explained on several grounds. Government regulations which require that certain drugs be sold to consumers only through drug stores under the supervision of properly qualified pharmacists, obviously constitute a formidable barrier to the entry of new kinds of competition.

The Director of Investigation and Research under the Combines Investigation Act found no clear evidence of agreement among druggists to adhere to the pricing guides but he found that they were widely followed. Price competition is generally regarded by pharmacists as demeaning to their status as professional persons. The Director questioned the propriety of druggists' associations performing the dual roles of regulating the profession of pharmacy and the operation of drug stores, from the point of view of protecting the health of the public and controlling the distribution of narcotics, etc., on the one hand, and acting as a trade association concerned with its members' economic welfare on the other.⁴

The Restrictive Trade Practices Commission concluded that variations in retail prices gave rise to concern among druggists' groups only when the possibility of lower prices was brought to the attention of the public through advertising. It was also the opinion of the Commission that part of the interest of provincial pharmaceutical associations in preparing and issuing price guides was due to their desire to lessen the amount of price variation.⁵ The Commission also pointed out that the rules of some provincial pharmaceutical associations require that a coded price be shown on any prescriptions given back to customers. The Commission thought that there could be only one main reason for this requirement, that is,

¹ *The Canadian Pharmaceutical Association, Inc., op. cit.*, p. 72.

² Restrictive Trade Practices Commission, *op. cit.*, p. 394.

³ *Ibid.*, p. 400.

⁴ Green Book, *op. cit.*, p. 256.

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 397.

that any other pharmacist would identify the symbol and charge the same price. The Commission concluded that the coding of prices should be abandoned.¹

One important consequence of the wide-spread application of the same percentage mark-up formula is that little incentive remains for retailers to seek or even handle lower-costing drugs because the higher the manufacturer's suggested list price, the higher the return to the druggist.

Since the existing pricing system encourages the use of higher-priced drugs in favour of lower-priced drugs, an attempt on the part of the Federal and Provincial Governments to stimulate increasing use of generic name drugs because of lower cost is likely to face many difficulties. We discussed the desirability of increasing the use of generic name drugs in Chapter 16. We discuss in this chapter the need for cost-price and industry studies relating to drugs which would bring to the attention of the Parliament of Canada, the governments and the public as a whole, the results that may be obtained from measures to encourage wider use of lower-priced generic name drugs. Should the studies show that whatever measures were taken prove to be ineffective, further consultation among governments, the drug industry and the medical profession may become necessary to achieve the desired objective of lowering of the prices of drugs where this objective may be achieved without affecting the quality and effectiveness of the drugs in question. We believe that with co-operation of the various groups involved, drug prices can be brought down in Canada and that public understanding of the facts and reasons for high drug prices, followed by appropriate public policies, will assist in achieving this objective.²

DRUGS IMPORTED AND MANUFACTURED IN CANADA

The United States has been the main source of Canada's imports of penicillin and streptomycin for many years. Great Britain has been the second most important source for both, until in the case of penicillin it was surpassed by Denmark in 1960.³ According to the Director of Investigation and Research under the Combines Investigation Act, Italy and Denmark appear to be the chief sources of supply for those firms which import drugs which they cannot obtain otherwise because of patent control in Canada.⁴ Neither drugs themselves nor the processes by which they are produced can

¹ *Ibid.*, p. 499.

² We stress further on in this chapter the need for an over-all programme of action and studies concerning drug costs and drug prices. (See also Chapter 2, Recommendation 81).

³ Restrictive Trade Practices Commission, *op. cit.*, p. 47.

⁴ Green Book, *op. cit.*, p. 42.

be patented in Italy and only chemical processes can be patented in Denmark. Apart from the countries already named, Czechoslovakia and West Germany were important sources of imports of other antibiotics in 1961.¹ It may be noted that in the case of a patented drug, an importer is likely to offer only a standard dosage form, while the Canadian patentee is likely to offer a wide variety of forms.²

In the course of the hearings conducted by the Restrictive Trade Practices Commission, Mr. Jules R. Gilbert appeared as a witness and was examined at some length about the effect of patents upon his company's business and about the drugs which he imported. His evidence was summarized by the Commission as follows:

"His company manufactures on its own premises about 70 per cent of the finished drug products sold by it. It does not make any basic drugs, importing at least 95 per cent of its requirements from outside Canada. He stated that, in respect of drugs for which patents are held, his company had difficulty in buying them in Canada. He cited the drug chloramphenicol, stating that the price charged by a Canadian company producing under a patent licence was \$208.00 a kilogram, that this company would not sell to him, but that he could buy the drug in Italy for about \$34.00 a kilogram. Another instance was meprobamate, whose price by the same Canadian company was, he said, about five times what he regarded as normal. Nor would this Canadian company sell meprobamate to him. "His company had no difficulty in purchasing drugs that were not subject to patents and for such drugs the prices charged by the same Canadian company were very close to the duty paid world price. Where patents existed, however, there was a tremendous spread between the prices charged by Canadian companies and those available abroad, particularly in Italy, but also in Denmark, Switzerland, and for chloramphenicol, Hungary".³

Chloramphenicol and the tetracycline group of drugs are by far the most widely sold of the broad spectrum antibiotics. The prices of almost all brands of these drugs were reduced substantially between December 1959 and June 1961 according to the Restrictive Trade Practices Commission and many of them were further reduced in 1962. The uses of these drugs overlap those of others whose prices were thereby apparently affected also. With respect to what caused the price reductions on chloramphenicol and the tetracyclines the Restrictive Trade Practices Commission noted that in 1959 there emerged three small suppliers of imported chloramphenicol all of whose prices were well below those of the large manufacturers. One of them was also supplying tetracycline. By June 1961, other small suppliers became active. The evidence indicated that the Gilbert company was importing these drugs under their generic names at prices much below those available

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 52.

² Green Book, *op. cit.*, p. 221.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 343.

in North America. The Commission concluded that while other factors may have been at work in Canada it was the competition from the lower-priced generic drugs imported from Europe which was the most important element in the price reductions made by the large brand name manufacturers at this time.¹

This conclusion is supported, at least indirectly, by the following price comparisons which are based upon information filed with us by the Government of the Province of Alberta on February 12, 1962, and also upon the answers to specific questions which we asked the Canadian Pharmaceutical Manufacturers Association and which were filed on April 30, 1962. In each case, brand names are compared with their generic equivalents:

Gilbert's price to the retail pharmacist of Tetracycline was \$14.40 per 100

Lederle's price to the retail pharmacist of Achromycin was \$25.88 per 100

Gilbert's price to the retail pharmacist of Chloramphenicol was \$10.00 per 100

Parke-Davis' price to the retail pharmacist of Chloromycetin was \$23.60 per 100

Intra's price to the retail pharmacist of Enicol was \$23.82 per 100

Gilbert's price to the retail pharmacist of Prednisone was \$4.00 per 100

Schering's price to the retail pharmacist of Meticorten was \$13.62 per 100

Gilbert's price to the physician of Prednisolone was \$5.00 per 100

Schering's price to the retail pharmacist of Meticortelone was \$13.62 per 100

Gilbert's price to the retail pharmacist of Chlorpromazine was \$2.00 per 100

Poulenc's price to the retail pharmacist of Largactil was \$5.34 per 100

Gilbert's price to the retail pharmacist of Meprobamate was \$1.08 per 100

Wyeth's price to the retail pharmacist of Equanil was \$24.94 to \$26.25 per 500

Ayerst's price to the retail pharmacist of Miltown was \$26.25 per 500.²

After examining the evidence, we have concluded that imports of drugs have had the effect of reducing drug prices in Canada in certain important areas. In our view the benefits accruing to society as a whole from lower drug prices outweigh the possibilities of increasing manufacturing opportunities of such drugs in Canada where the smallness of the Canadian market makes production of such drugs in this country an uneconomic enterprise.

Hence we conclude that consideration should be given to the possible reduction or abolition of tariffs on imported drugs, change in the administration of "anti-dumping" regulations in respect to drugs, and to compulsory licensing under the Patent Act to include the licensing of imports of drugs with safeguards to assure the quality of drugs brought into Canada. These subjects are discussed more fully later on in this chapter.

¹ *Ibid.*, p. 358.

² Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

PRICE TRENDS

The price index for prescriptions, compiled by the Dominion Bureau of Statistics has not risen as rapidly as the cost of living index. The index for prescription drugs was 106.1 in 1951, it rose to 111.6 in 1959, to 112.9 in 1960, and dropped back to 100.6 in 1961.¹ However, the annual surveys conducted by the Canadian Pharmaceutical Association and reported in the Canadian Pharmaceutical Journal show that the average price per prescription in Canada increased 86.9 per cent between 1951 and 1961.² In addition expenditures on prescribed drugs in retail drug stores as a percentage of Gross National Product rose annually in the period 1953 to 1959 inclusive from 0.2 per cent to 0.3 per cent, and remained unchanged at 0.3 per cent in 1960 and 1961.³ These apparently conflicting trends can only be reconciled if there has been greater use of higher-priced drugs or if there have been larger quantities dispensed per prescription.

The limited purpose to which the Dominion Bureau of Statistics Price Index of Drugs is devoted should be borne in mind: it is used as a component of the Consumer Price Index which measures changes in prices of a specific basket of goods. This basket is periodically reviewed. In the case of drugs, the last revision occurred in 1957.

The price index on drugs covers only five drugs on a weighted basis.⁴ As a result the price index reflects price changes of only a minute fraction of the several thousand items in use in Canada as prescribed drugs.

We conclude that any examination of drug prices requires more intensive inquiry than reliance on the general purpose price index on drugs currently in use by the Dominion Bureau of Statistics. In effect it would be our hope that, if cost-price and industry studies relating to drugs are undertaken, more comprehensive price indices with appropriate subdivisions will be developed covering prescribed pharmaceuticals in Canada.

In the analysis of the industry which he prepared for the Canadian Pharmaceutical Manufacturers Association, Professor Brian Dixon referred to one drug company which had discovered that the products which made up 60 per cent of the items in its regular line and contributed 45 per cent of its sales volume at one time, ceased to exist on the market at the end of a ten-year period.⁵ Similarly the Director of Investigation and Research under the Combines Investigation Act pointed out that one large company,

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 390.

² *Ibid.*, p. 388.

³ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

⁴ The drugs covered are: (a) Tetracycline capsules, (b) two types of Penicillin tablets, (c) Phenobarbital tablets, (d) Secobarbital Sodium capsules and (e) Meprobamate N.N.D. (non-narcotic drug) (2-methyl-2-n-propyl-1, 3-propanediol dicarbamate).

⁵ Restrictive Trade Practices Commission, *op. cit.*, p. 368.

Smith Kline & French, reported that 60 per cent of its sales are of products less than three years old and 80 per cent of its sales are of products less than six years old. In the case of this company the Director naturally concluded that a comparison of present prices with prices ten years earlier would be meaningless because the same products were not involved.¹ Further the Canadian Pharmaceutical Association indicated that one large United States pharmaceutical company, American Home Products (whose subsidiaries Wyeth and Ayerst operate in Canada) stated before the Kefauver Committee in 1960 that 65 per cent of its current ethical drug business was in products that did not exist five years previously. The Canadian Pharmaceutical Association also referred us to an estimate that for the pharmaceutical field as a whole, 50 per cent of the products now being used were not on the market five years ago and 75 per cent were not on the market ten years ago.²

The price histories of a number of important drugs have been substantially different according to whether the drugs were subject to patent control or whether they were not. The Director of Investigation and Research under the Combines Investigation Act found that the prices of the older penicillins had declined very greatly since their introduction. As an example he referred to a kind of penicillin introduced by Eli Lilly and Company (Canada) Limited in 1948 with a list price of \$23.40 which by September 1959 had a list price of only \$1.50. Streptomycin and dihydrostreptomycin were the next antibiotics to be discovered after penicillin and they likewise were highly priced at first but have also experienced a very large decline in price.³

The Restrictive Trade Practices Commission concluded:

"... In respect of the older penicillins, for which no patents were obtained, and the streptomycins, for which licences were freely given, prices soon began to decline and over a period of some years reached a level that appears to have been very close to costs. However, in respect of later drugs controlled closely by patents, notably the five broad spectrum antibiotics, the story is quite different. Chlortetracycline (Aureomycin), chloramphenicol (Chloromycetin) and oxytetracycline (Terramycin) came on the market in Canada successively within a year or two, beginning in May 1950. Price reductions occurred down to 1953, due largely to improvements in methods of production. From 1953 till late in 1960 no reductions occurred. When Cyanamid introduced tetracycline (Achromycin) in 1953 and demethylchlortetracycline (Declomycin) in 1959 it adopted the prevailing price of the three earlier broad spectrums. When price reductions did occur late in 1960 there may have been several contributing factors, but the Commission is of the opinion that the lower prices of imported European drugs constituted the most important one. During the intervening years, notwithstanding that all of these drugs enjoyed large

¹ Green Book, *op. cit.*, p. 237.

² The Canadian Pharmaceutical Association, Inc., *op. cit.*, p. 27.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 323.

sales and that the costs of both basic drugs and finished dosage forms showed remarkable variations between companies, no company thought it desirable to reduce its prices. It was as if the price established in 1953 had come to be regarded as the right price".¹

Further reductions occurred in the prices of the drugs referred to by the Commission in 1962.² Other antibiotics declined in price in the same period. Between December 1959 and June 1961 the following drugs experienced the substantial reductions in list prices indicated: erythromycin 15.7 per cent, griseofulvin 29.2 per cent, neomycin tablets 41.1 per cent, novobiocin 15.1 per cent, triacetyloleandomycin 15.5 per cent, spiramycine 30.5 per cent. There were, however, no reductions in the list prices of cycloserine, kanamycin, neomycin sulphate powder, nystatin, ristocetin, vancomycin and viomycin sulphate. The latter items are all specialty products which have to face little or no competition.³

Between December 1959 and June 1961 reductions were made in the list prices of almost all brands of meprobamate. Similar reductions occurred with respect to prednisolone and prednisone, but not with respect to other important corticosteroids in the supply of which there were few firms handling generic products.⁴

In the study which he did for the Canadian Pharmaceutical Manufacturers Association, Professor Brian Dixon made the following observation about price trends for individual drugs. Initially, the price set for a new drug is demand oriented in the sense that it is not based on cost so much as on estimates of demand and the availability of substitutes. Introduction of competing products or improvement in production of the drug in question tends to reduce its price to a second level where it often stays. Eventually it may be largely displaced by another drug significantly better in therapeutic performance. At this point sharp price reductions on the first drug would have little effect, because, according to Professor Dixon, the customer is not interested in an inferior product at any price, except perhaps on the fringe of the market. Thus there is no point in the manufacturer's reducing the price further and price rigidity becomes manifest.

Professor Dixon suggested the only competitive solution for the manufacturer of the first drug was to introduce some innovations himself. This analysis appears to be incomplete in important respects. The evidence suggests that drugs are sometimes displaced by means of successful sales promotion campaigns, whether or not the new drugs give significantly better performance. Moreover it is not the consumer who makes the choice between the new and the old drug. It is a logical inference that if faced with the

¹ *Ibid.*, p. 511.

² *Ibid.*, p. 332.

³ *Ibid.*, p. 357.

⁴ *Ibid.*, p. 336.

opportunity of using a new drug with a slightly greater therapeutic value at the cost of a big increase in price, the consumer might have a very different interest from the physician. Finally, the evidence made available to us suggests that a number of important drugs have not in fact followed the pattern suggested by Professor Dixon but were reduced substantially in price only as a result of the competition of imports.

We were told by the Ontario Branch of the Canadian Society of Hospital Pharmacists that in the year 1961 there was a modest pause in the rising trend in drug costs primarily due to the reduction in price of many of the major antibiotics. This trend appears to have been temporary as newer drugs are now appearing on the market to replace some of those that were reduced in price.¹ This opinion was shared by the Director of Pharmaceutical Services for the Saskatchewan Department of Health who said that while there was a tendency for the cost of individual preparations to remain fairly stable or even fall in price, many drugs in recent years have had only a short period of popularity before being superseded by newer drugs which have had a tendency to come on the market at higher prices than their predecessors.² These opinions appear to be supported by data given to us by the Province of Alberta covering the years 1958 to 1961. In the Aberhart Memorial Sanatorium, where the use of antibiotics predominates, the cost of drugs per patient-day has risen from 16 $\frac{8}{10}$ cents to more than 27 cents in a three-year period. At the Ponoka Mental Institute, where ataractic drugs are used in greatest proportion, the cost has risen from one cent to more than two cents per patient-day over the same period.³

INTERNATIONAL COMPARISON OF DRUG PRICES

The Director of Investigation and Research under the Combines Investigation Act presented in the Green Book⁴ some international comparisons of 1959 prices for a number of important drugs. Some of these comparisons are reproduced here in simplified form, e.g., where more than one price was available from a single country, the highest price is used so as to understate, if anything, the apparent disadvantage to the Canadian consumer:

¹ *Ontario Branch of the Canadian Society of Hospital Pharmacists*, brief submitted to the Royal Commission on Health Services, Toronto, June 1962, p. 18.

² Totten, W. J., Director of Pharmaceutical Services, Medical Services Division, Saskatchewan Department of Public Health, address delivered to the Canadian Pharmaceutical Association Convention in August 1960; see Appendix A, *The Saskatchewan Pharmaceutical Association*, brief submitted to the Royal Commission on Health Services, Regina, January 1962.

³ *The Government of the Province of Alberta*, *op. cit.*, p. 110.

⁴ *Green Book*, *op. cit.*, p. 203.

Product	Country	Marketing Company	Price to Druggist
			\$
Prednisone	Japan	Merck	27.78
	Australia	"	24.00
	Panama	"	22.99
	Italy	"	22.16
	Canada	"	20.80
	United States	"	17.90
	Austria	"	17.16
	Holland	"	16.05
	Brazil	"	14.15
	Great Britain	"	7.53
Chlorpro- mazine	Canada	Rhone-Poulenc	3.75
	United States	Smith Kline & French	3.03
	Japan	Banyu Pharmaceutical Co.	2.14
	Brazil	Rhodia	1.53
	Belgium	Specia	1.37
	Holland	Specia	1.31
	Italy	Farmitalia	1.22
	Germany	Bayer97
	Australia	May & Baker94
	Great Britain	May & Baker77
	France	Specia51
	United States	Smith Kline & French	3.93
	Canada	Rhone-Poulenc	3.60
Prochlor- perazine	Australia	May & Baker	2.84
	Great Britain	May & Baker	2.24
	Belgium	Specia	1.61
	France	Specia80
	Germany	Bayer80
	Venezuela	Wyeth	5.44
	India	Lederle	4.79
	Iran	Cyanamid	4.68
Mepro- bamate	Canada	Wyeth	3.60
	Holland	Cyanamid	3.56
	Australia	Wyeth	3.47
	United States	Wyeth	3.25
	Belgium	Cyanamid	3.25

Product	Country	Marketing Company	Price to Druggist
			\$
	France	Byla	2.65
	Japan	Banyu	2.56
	Brazil	Wyeth	2.20
	Mexico	Cyanamid	2.00
	Italy	Wyeth	1.94
	Austria	Cyanamid	1.56
	Great Britain	Cyanamid	1.48
	Germany	Asche (Wyeth)	1.36
	Argentina	Cyanamid75
Sparine	Canada	Wyeth	3.15
	United States	Wyeth	3.00
	Venezuela	"	2.70
	Mexico	"	1.66
	Holland	"	1.59
	Italy	"	1.32
	Brazil	"	1.26
	Australia	"94
	Germany	Bayer83
Serpasil	United States		12.00
	Canada		9.87
	Venezuela		7.85
	Japan		5.56
	Brazil		5.53
	India		5.29
	Italy		4.90
	Iran		4.87
	Australia		4.41
	Belgium		4.24
	Great Britain		3.94
	Germany		3.42
	Austria		2.78
	France		1.21

Cyanamid of Canada gave evidence to the Restrictive Trade Practices Commission about comparative prices in a number of countries in late 1961 for its product Achromycin. Tabulated below are suggested prices to the consumer for packages of 16 and 100 capsules:

Product	Country	Marketing Company	Consumer List Prices	
			(16's) \$	(100's) \$
Achromycin	Greece	Cyanamid	7.16	38.61
	United States	"	7.11	43.13
	Canada	"	7.11	43.13
	Costa Rica	"	6.01	34.80
	Japan	local production	6.00	26.39
	Colombia	Cyanamid	5.84	34.62
	Italy	local production	5.81	—
	Mexico	Cyanamid	5.59	33.73

The Commission was informed that achromycin is produced in both Japan and Italy, but in the other countries mentioned, it is imported from the United States.¹

Cyanamid of Canada also presented the Restrictive Trade Practices Commission with a comparison of its actual sales by product groups at Canadian prices with what such sales would have amounted to, calculated according to American prices. For all products distributed by the Canadian company, the difference between the price level in the United States and the higher Canadian price level was about equal to the amount of the federal sales tax.²

The Green Book contains a comparison of the list prices of certain drugs in the latter part of 1959, in Canada and the United States.³ Included in the comparison are penicillins, dihydrostreptomycin, broad spectrum and other antibiotics and tranquilizers. In the comparison, there are 75 items if each package size of drug listed for both countries is treated as a separate item. In the large majority of instances, the price is higher in Canada than in the United States.⁴ The Canadian Pharmaceutical Manufacturers Association reworked the comparison to remove the federal sales tax from the Canadian prices. On this basis, out of a total of 69 items, prices of 11 items were the same or within three cents of each other in the two countries, prices of 30 items were lower in Canada than in the United States, and prices of 28 items were higher in Canada than in the United States.⁵

Additional light is thrown on the general relationship between prices in Canada and the United States by another comparison made by the

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 406.

² *Ibid.*, p. 415.

³ Green Book, *op. cit.*, p. 210.

⁴ Restrictive Trade Practices Commission, *op. cit.*, p. 411.

⁵ *Ibid.*, p. 415.

Canadian Pharmaceutical Manufacturers Association. Comparing list prices of 14 companies selling both in Canada and the United States and covering a total of 1,213 products, the Association found that 739 were higher priced in Canada and 212 were higher priced in the United States (the remainder were presumably the same).¹ The Canadian list prices included the federal sales tax. To remove it would of course drop some products from the higher-in-Canada classification. Where Canadian prices were higher, however, the differences appeared in most cases substantially to exceed what could be attributed to the tax (i.e., five to six per cent of the retail price).

We have earlier referred to the effect of the application of an unchanging percentage mark-up by the retail druggist, in expanding any initial difference in the price from the manufacturer to what may be (if the drug is an expensive one) a substantial difference in dollars and cents at the retail level. In addition, there is another factor. Resale price maintenance is illegal in Canada and the Director of Investigation and Research under the Combines Investigation Act found no evidence that manufacturers of drugs attempted to force druggists to maintain prices. In the United States on the other hand, in those states in which so-called "Fair Trade" laws are in force, drugs are subject to them and druggists can be compelled to maintain the "Fair Trade" prices. It is ironic that in spite of these legal differences, Canadian druggists appear to be reluctant to cut the manufacturers' suggested resale prices, whereas in the United States, the so-called "Fair Trade" price is normally set at about 90 per cent of the suggested resale price, and there is evidence that this lower price level tends to prevail in some areas.²

We have made the point earlier that in many European countries the organization of the distribution of drugs differs greatly from that in Canada and the United States. We mentioned the rigid control in Denmark of the number and location of retail pharmacies, and that their activity is confined to handling pharmaceuticals. The Restrictive Trade Practices Commission was informed that in addition, prescription pricing in Denmark is controlled by the government. It was told that in 1958 the average cost of prescriptions filled in Denmark was less than \$1 as compared with the average cost in Canada at retail of \$2.78.³

The Canadian Pharmaceutical Association drew our attention to the fact that average prescription prices at retail tend to be higher in the United States than in Canada. The respective averages were estimated to be \$1.90 and \$1.68 in 1951, and \$3.19 and \$3.06 in 1960.⁴ In the light of the other evidence which we have referred to, this suggests that a larger proportion of

¹ *Ibid.*, p. 414.

² Green Book, *op. cit.*, p. 89.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 409.

⁴ *The Canadian Pharmaceutical Association, Inc.*, *op. cit.*, p. 132.

the more costly drugs are prescribed in the United States than in Canada. This difference may rest upon the earlier introduction or more effective promotion of the higher costing drugs in the United States, or it may perhaps reflect greater concern on the part of Canadian physicians for their patients' purses.

We turn now to an examination of the institutional factors as they affect cost and price levels of drugs prescribed and sold in Canada and we deal in particular with the Patent Act, the Trade Marks Act, Tariffs and other legislation.

PATENT ACT

In Canada, since the overwhelming proportion of patents issued is held by foreign residents, we might assume that the cost to the country of obtaining the benefits of the patent system can be measured by whatever royalty payments are made. This is not the case. The Restrictive Trade Practices Commission makes the comment "that drug manufacturers have secured far more from the price margins on drugs under patent control than would have been secured from any royalties which might have been awarded under compulsory licences".¹ The essence of the patent system is that the owner of the patent may charge monopoly prices for his product and call upon the power of the state through the courts to protect his monopoly position. Experience elsewhere with the patent system, however, indicates that other monopoly elements may develop which are not so obvious. Among such elements which have been identified are the tendency for patents to accumulate in few hands (in such circumstances the monopoly power of a patent portfolio is generally considered to be greater than the sum of the little bits of monopoly coming from individual patents), the fact that patent litigation can be used as a powerful coercive weapon, and the fact that competition may be eliminated through cross-licensing of patents with other important producers.

Against this kind of background many countries have given drugs special treatment in the development of their patent systems. For example in Italy neither medicines nor processes for their production are patentable. In a few countries including the United States and Great Britain, both the drugs themselves and the processes for their manufacture may be patented.² In Canada processes are patentable. Under Section 41 (1) of the Patent Act

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 523.

² *Ibid.*, p. 99.

however, whenever the process of manufacture is a chemical one, a patent can be obtained only for the process, or for the drug when produced by that process alone. Moreover, a recent judgment of the Supreme Court of Canada makes clear that a substance, intended for food or medicine, which is produced by a chemical process cannot be claimed as an invention by itself. It must be accompanied by a valid claim for the process.¹ The production of the same drug by another process, therefore, would not involve infringement. However, when a drug is produced by a process other than a chemical one, then both the process and the product may be patented individually and the claim for the product will be valid regardless of the process by which it is produced.

There is one consideration which makes the position of the holder of a Canadian patent less vulnerable than it might appear in comparison with that of the holder of an American patent. Under Canadian patent law, automatic protection is assured by a process patent which prevents the importation of products made abroad by processes patented in Canada. The theory is that the value of the process patent could be adversely affected if products manufactured by the process abroad could be freely imported. In the ordinary case this automatic protection from imports applies whether the product is new or not. However, we are informed that in order for the automatic protection to apply to drug patents the product itself must be new also.² In the United States there is no automatic protection of the patented process when the product is not also patented. As a result, drugs of Italian manufacture made by processes patented in the United States are coming into that country in increasing quantities at low prices.³

Another reason why the importation of drugs into Canada may be more difficult than appears at first glance is that because of the manner of establishing whether or not two drugs have been made by the same process. Section 41 (2) of the Patent Act puts the onus of proof on the shoulders of the defendant in an infringement suit.⁴

In the Patent Act there exist provisions for the compulsory licensing of patents on grounds which are applicable to all fields and not just to drugs. Compulsory licences may be issued whenever patents have been used to restrain or injure trade unduly or whenever the exclusive rights provided by the patents have been abused. In addition to such general provisions Section 41 (3) of the Patent Act provides specifically for the compulsory

¹ C. H. Boehringer Sohn versus Bell-Craig Limited, 1963 (unreported).

² Transcript, *op. cit.*, June 2, 1962, Vol. 66, p. 12581.

³ Committee for the Furtherance of Creative Research in the Pharmaceutical and Allied Industries, brief submitted to the Royal Commission on Health Services, Toronto, June 1962, p. 30.

⁴ Restrictive Trade Practices Commission, *op. cit.*, p. 101.

licensing of patents relating to food and drugs. The significance of this special provision is reviewed in the following passages of the Report of the Restrictive Trade Practices Commission:

"There can be no doubt that Parliament enacted subsections (1) and (3) of section 41 of the Patent Act in the interest of public health. Under section 41 (1), a pharmaceutical product may be patented if produced by a process other than a chemical one, but whenever the process of manufacture is chemical, a patent can be obtained only for the process or for the drug when produced by that process. Thus a drug produced by a chemical process receives less protection than those produced by other processes. When a drug made by any process, chemical or other, is subject to patent protection, a compulsory licence to manufacture such drug can be obtained under section 41(3) at any time on application to the Commissioner of Patents unless the Commissioner sees good reason not to grant the licence. The subsection further provides that in fixing the royalty payable under the licence the Commissioner shall have regard to the desirability of making the medicine available to the public at the lowest possible price consistent with giving to the inventor due reward for the research leading to the invention.

"One would expect to find competitors eagerly seeking licences in a period when many new drugs have been coming on the market, some of which have marked great advances in the treatment of certain types of diseases, and many of which have found wide acceptance and enjoyed very substantial sales. The prospect of profit should lead to such activity. What has been the actual situation? From 1923, when the special compulsory licence provision was enacted, to 1949 only one application was made for a compulsory licence. From 1949 to January, 1963, 22 applications were made. Of these, 2 were withdrawn and 2 have not been proceeded with. Indeed the foregoing record indicates that the compulsory licensing provisions have been put to very insignificant use.

"In his evidence before the Commission (Hearing, p. 296), Mr. J. W. T. Michel, the Commissioner of Patents, stated that only one application had ever been refused. It was an application for a licence to import, not to manufacture. As a rule, therefore, there appears to be no serious difficulty in the path of an applicant. Up to 1959, however, there may have been some uncertainty about the right interpretation to be given to section 41(3). In that year the Supreme Court of Canada ruled that section 41(3) applied to the product when produced by a chemical process as well as to the process itself. The uncertainty that may have prevailed up to the time of this decision may have contributed to the view that an application for a compulsory licence would be a lengthy matter at best and might lead to expensive, long drawn out litigation of which the outcome would be doubtful. For this reason, the Commission tried to ascertain whether the decision referred to above resulted in some increase in applications for compulsory licences. There were 8 applications from 1949 to July, 1960 and 6 in the next twelve months, but of these 6, 2 have since been withdrawn and 2 have not been proceeded with. Since July 1961, 8 more applications have been made, but none has yet been disposed of. It appears, therefore, that some increase has occurred in the number of applications, but in view of their subsequent history the increase cannot be regarded as significant.

"It may be argued that the compulsory licensing provisions induce the patent holders to grant licences on a voluntary basis. The Commission

has no means of ascertaining the number of voluntary licences, but the survey conducted by the C.Ph.M.A. indicates that the number is quite small in comparison with the number of manufacturing companies and the number of successful new drugs. With respect to this matter, Mr. J. W. T. Michel stated that there is still a marked tendency on the part of foreign companies holding Canadian patents to object strenuously to the granting of licences (Hearing, p. 302). Apart from cross licensing arrangements arising out of conflicting patent claims of 2 or more companies, there appear to have been no voluntary licences granted in respect of the five most important broad spectrum antibiotics. The position is almost the same for the newer penicillins, the tranquillizing or ataractic drugs and the corticosteroids. It is significant that it is precisely these four categories of drugs that have had the greatest impact upon the market during the last twelve or fourteen years. A number of them have had very large sales and have earned great profits for the patent holders. For these reasons, the Commission does not consider that the small number of applications for compulsory licences can be explained by the willingness of the patent holders to grant licences on a voluntary basis.¹

The evidence indicates that meagre use has been made of the compulsory licensing provisions of Section 41 (3) of the Patent Act. The Restrictive Trade Practices Commission suggested a number of factors which singly or in combination may act as deterrents either to voluntary or compulsory licensing. Possibly the rapid obsolescence of drugs means that most firms do not think it worthwhile to set in train the action necessary to obtain licences. Possibly the delays and inconvenience involved in obtaining a licence deter prospective producers from seeking them. In this connection the Commissioner of Patents gave evidence that even without any significant opposition, the length of time required from the making of an application for a compulsory licence to the issuance of it cannot be shortened to less than seven or eight months. If the patent holder wished to resist the claim for a compulsory licence he might of course appeal all the way to the Supreme Court of Canada². Perhaps the size of the capital expenditures required for producing a drug in relation to the size of the market discourages a second or third manufacturer from undertaking to make the same product. Potential rivals may be deterred by the expensive promotion which would be necessary to win business against an established product. Important know-how may exist which would not be disclosed by the patent. In some cases the probable royalty payment might be regarded as excessive. The policy of large drug firms may be to respect one another's patents and not to seek compulsory licences, although no evidence of this was presented to the Restrictive Trade

¹ Parke, Davis & Company, Ltd. versus Fine Chemicals of Canada Limited, 30 Canadian Patent Reporter, 59, as quoted in Report of the Restrictive Trade Practices Commission, *op. cit.*, p. 508.

² *Ibid.*, p. 108.

Practices Commission. The most probable explanation in the view both of the Director of Investigation and Research and the Restrictive Trade Practices Commission is that most of the large drug firms in Canada are subsidiaries of international companies with world-wide operations which are interested in promoting their own specialties. They are not interested in producing and promoting a product competitive with someone else's specialty for the Canadian market alone. Support for this explanation exists in the fact that the few compulsory licences which have been issued have gone chiefly to wholly-owned Canadian firms.¹

The Royal Commission on Patents, Copyright and Industrial Designs in its Report on Patents of Invention dated December 31st, 1959 discussed the subject of compulsory licensing. Without giving it strong endorsement the Ilsley Commission recommended that the general patent system in Canada be retained, but only with important modifications. Among the modifications recommended was the wider use of compulsory licensing. It indicated that it was concerned about the possibility of delaying tactics being employed against this wider use. To prevent such delays, the Ilsley Commission recommended that rules be made for proceedings before the Commissioner of Patents that would provide for complete disposition of every application for a compulsory licence within three months after proof of service of notice of the application upon the patentee. If serious delays developed, notwithstanding the new rules, the Ilsley Commission believed that amendments to the Patent Act should be considered to make licences issuable as of right. The Restrictive Trade Practices Commission endorsed these recommendations to the extent that the patent system continues to be applied to drugs.²

However, the Restrictive Trade Practices Commission was impressed, as the Ilsley Commission had been, with the views expressed by Penrose that:

"Any country must lose if it grants monopoly privileges in the domestic market which neither improve nor cheapen the goods available, develop its own productive capacity nor obtain for its producers at least equivalent privileges in other markets. No amount of talk about the 'economic unity of the world' can hide the fact that some countries with little export trade in industrial goods and few, if any, inventions for sale have nothing to gain from granting patents on inventions worked and patented abroad except the avoidance of unpleasant foreign retaliation in other directions. In this category are agricultural countries and countries striving to industrialize but exporting primarily raw materials.'"³

¹ *Ibid.*, p. 510.

² *Ibid.*, p. 515.

³ Penrose, Mrs. Edith T., *The Economics of the International Patent System*, 1951, pp. 116-117, as quoted in *Ibid.*, p. 517.

Applying the tests suggested by Penrose, the Restrictive Trade Practices Commission concluded:

"The evidence collected in this inquiry does not show that patents have either cheapened the drugs available in Canada or improved them in any way. Productive capacity in Canada has definitely increased, but bearing in mind the great increases that have occurred in Italy, where there are no drug patents, it appears likely that Canadian productive capacity might have grown without patent protection, perhaps even at a faster rate than has occurred. Canadian producers have, in International Convention countries, whatever privileges those countries give their own nationals, which may or may not be the same as those granted in Canada by patents to nationals of those countries. Finally the Commissioner of Patents stated in evidence that with respect to Canadian patents generally the percentage held by Canadian residents was less than six per cent and in respect of drugs it was definitely less than that (Hearing, p. 310). It is therefore clear that Canada has very few drug inventions for sale. This has been the situation for many years and the Commission sees nothing in the evidence which suggests there is likely to be any significant change. The Commission has no complete information as to the volume of Canadian exports of patent protected drugs, but from the figures for 1958 contained in Table XLIII of the Green Book it would not appear to be large. For these reasons Canadian drug patents appear to have conferred substantial economic advantages on patentees, nearly all of them foreign. Only a handful of Canadians have received similar benefits therefrom".¹

The Restrictive Trade Practices Commission, not having found any advantages to Canada from the patent control of drugs which would offset in any significant degree the disadvantages to the Canadian public, nor being able to see any change in the foreseeable future, concluded that the only effective remedy was the abolition of patents on drugs. Even if compulsory licences were issuable as of right the Restrictive Trade Practices Commission believed that only the small Canadian drug companies would take advantage of such provisions. The results would only be palliative, not remedial.² The Commission did not apparently address itself to the question of how effective a remedy might be provided by compulsory licences to import.

We asked the Canadian Pharmaceutical Manufacturers Association the specific question: "Is there any reason why the Patent Act (Canada) should not be amended so that an importer might be able to obtain a licence to import for sale in Canada any patented drug by paying a royalty fee to be fixed by the Commissioner of Patents or by statute provided that the quality of the imported drugs meet Canadian standards?" The Association did not in its answer raise any special issues affecting the drug industry, but in essence, simply said the requirement that the patentee must work his

¹ *Ibid.*

² *Ibid.*, p. 516.

patent on a commercial scale in Canada is a fundamental of our Patent Act.¹ However true this may be of existing legislation, the Ilesley Commission recommended that the Patent Act be clarified to establish a quite different principle. It wrote:

"In short, as we foresee the effect of our proposals, it is this: the rights under patents will be potentially available to persons able and willing to work inventions in Canada, and whether or not capital and labour should be applied to their working will depend on such considerations as would normally affect such a decision in the absence of any patent rights.

"We see no particular merit in attempting, by a bias in our legislation, to direct investment to the working of new inventions. Rather, we believe, the public interest will best be served if investment finds its way into the most productive fields available rather than being artificially diverted into exploitation of new inventions where the value of the enterprise to the economy is doubtful".²

Three principal aims of the patent system have been suggested by Dr. Vannevar Bush. First it seeks to stimulate invention and the search for new applications of knowledge. Second it seeks to promote the introduction into public use of the new devices or processes. Third it seeks to eliminate secrecy and to make available to others skilled in the field full disclosure of the new ideas. The Restrictive Trade Practices Commission examined the extent to which these objectives were achieved in the special circumstances of the Canadian drug industry.³ About the third point the Commission concluded that no substantial benefit flows from the fact that discoveries are disclosed to the Canadian Patent Office. Most discoveries are made abroad so that when they are filed in Canada, they have already been made known to the world. In some cases know-how rather than the patent itself may be of primary importance and the patent system does nothing to disseminate this knowledge. Moreover the suggestion has been made that it is the inventor who is least sure he can guard his secret who is likely to be the most interested in obtaining the protection of the state in the exploitation of his monopoly.

With respect to the second objective the Commission concluded that patents are no prerequisite for the investment of funds in new lines of production. In the absence of patents, there would still be market opportunities for drug firms in Canada as there are at the present time for all other lines of production where patents are not important.

¹ Canadian Pharmaceutical Manufacturers Association, Answers to Specific Questions received from the Royal Commission on Health Services, *op. cit.*, p. 16.

² Royal Commission on Patents, Copyright and Industrial Design, *Report on Patents of Invention*, Ottawa: Queen's Printer, 1960, p. 81.

³ Restrictive Trade Practices Commission, *op. cit.*, p. 518.

As to the first objective there are a number of reasons why patent protection is not likely materially to stimulate research and invention in the Canadian drug industry. In the first place Canadian patents are overwhelmingly owned by foreigners who have in the past found it more efficient to concentrate research activity elsewhere. In the second place recent increases in research spending in Canada do not reflect a major shift in this situation but are largely due to increased clinical testing in Canada, now required under regulations of the Food and Drug Directorate.

In the third place the main Canadian research contributions have come from non-commercial activities of organizations like the Connaught Laboratories for example. Patents therefore cannot be a *sine qua non* of major advances in the drug field. In fact as we have indicated earlier, there is considerable controversy about how important the contribution of the patent system elsewhere has been to major advances in drugs. It does place a profit premium on the development of minor modifications which can be patented but which may have slight value or even questionable merit. In the fourth place there are suggestions that a plateau has been reached and that recent discoveries in the realm of fundamental research have now been fully exploited by the drug companies, and until a major break-through again occurs the same opportunities will not exist anywhere for the development work which the drug companies have so far engaged in outside Canada.

So far as research in Canada is concerned, even assuming that greater emphasis should be given to commercial rather than non-commercial organizations, there are rather clear alternatives to the patent system for encouraging such commercial research. Amendments to the Income Tax Act in 1961 provided for acceleration of the rate at which capital expenditures on research could be written off as expenses. In 1962 a new plan administered through the National Research Council provided that financial assistance for applied research and development would be given on a matching basis, with the government contributing up to 50 per cent of the cost of some projects. Also in 1962, corporate taxpayers undertaking to increase industrial research in Canada were permitted to deduct 150 per cent of their increased expenditures on scientific research for industrial purposes.¹

There appears little reason to believe that the abolition of patents in Canada would have any effect on research activities in the United States or Europe. On the other hand, the results of such research would not be withheld from the Canadian market because this market would continue to offer profitable marketing opportunities as it already does for non-patented goods.

¹ Committee for the Furtherance of Creative Research in the Pharmaceutical and Allied Industries, *op. cit.*, pp. 10-11.

On examining the evidence and the various arguments put forward for and against the retention of the patent system with respect to drugs in Canada, we have arrived at a conclusion similar to that of the Restrictive Trade Practices Commission: "It is the conclusion of this Commission that the control over drugs exercised through patents in Canada is disadvantageous to the users of drugs in this country by enabling the suppliers of such drugs to charge high prices in relation to the cost of production and distribution of the medicines."¹

In view of the circumstances, two courses of action appear to be indicated: one is to follow the proposal made by the Restrictive Trade Practices Commission and to recommend that patents on drugs be abolished in Canada; the other is to modify the existing patent system as it affects drugs by permitting compulsory licensing of imports and to streamline generally procedures as they relate to compulsory licensing together with an amendment of the Patent Act which would extend to provincial governments and their agencies the right to use patented inventions, a right presently extended only to the Crown in the name of the Government of Canada.

We are inclined to follow the second course which aims at making every attempt to use a modified patent system to achieve the desired objectives of bringing down drug prices in Canada while still encouraging manufacturing of drugs in this country where such undertakings are economically justifiable.

We realize, however, that notwithstanding measures that may be taken along lines suggested, prices of drugs may not be reduced significantly for various reasons. We believe it is only fair to the drug industry to serve it notice that the nation expects that drug prices can be brought down in Canada over the next five years to levels more comparable to those prevailing in other industrialized countries of the world. The time has come for the drug industry in Canada to recognize that it is not just like any other industry operating for gain but that it deals in products which are essential for health and indeed for life. Thus the industry must have a common interest with the public at large in making available to Canadians drugs of high quality at as low prices as can be achieved through economic means of production and distribution.

In view of the foregoing it may be desirable that the Federal Government consider delaying for five years a decision to implement the recommendations of the Restrictive Trade Practices Commission that patents on drugs be abolished, in order to ascertain whether alternative measures might be taken to achieve the same results within that period.²

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 523.

² See Chapter 2, Recommendation 68.

TRADE MARKS ACT

Earlier in this Report, we indicated that the name used for a marketing company in Canada is the same as that given for the marketing company in various other countries. No attempt was made to distinguish between related companies; parent and subsidiary were treated as the same company. Most of the large pharmaceutical companies which operate internationally, conduct their business in Canada by means of a subsidiary or affiliated company incorporated here.

In some instances, in the international comparisons of drug prices earlier referred to, a drug selling at a relatively high price in Canada, sells at substantially lower prices in other countries under the same brand name. This raises the question of why supplies are not imported to Canada from such countries at these lower prices. This, of course, refers to supplies of brand name, not generic drugs. Obviously a parent organization would not wish to spoil the market for its Canadian subsidiary, if it could prevent it, but this does not explain why independent Canadian importers do not work out an arrangement with foreign drug wholesalers for example. The spread is so great in some cases that the tariff alone would not appear to discourage such an arrangement. Moreover the reputation of the large pharmaceutical companies is such that there would be no problem about acceptance of their products by the medical profession as there sometimes is with imports under generic names. Put another way, the question may be asked, what permits prices of brand name drugs in Canada to be maintained above the landed cost of imports?

We have already referred to the feature of Canadian patent law which provides automatic protection to the holder of a process patent against imports of a product made by that process. Another important barrier appears to be that under the Trade Marks Act, the owner of a Canadian trade mark can monopolize the importation and distribution of a product bearing this mark, whether or not any production at all is carried on in Canada.

Harold G. Fox, Q.C., comments on the current standing of the law as follows:

"Even though interlocutory injunctions are rarely granted in cases of trademark infringement, there are occasions when the facts warrant the court in restraining a defendant from continuing to infringe. In *Remington Rand Limited v. Trans-World Metal Company Limited* the plaintiff, the owner in Canada of certain trademarks for use in association with electric shavers, sold in Canada shavers manufactured by its parent corporation in the United States and marked with the trademarks in question. The defendant imported from the United States electric shavers made by the same corporation and also imported others from Germany manufactured by a company associated with the American parent corporation. All the

shavers were marked with one or more of the trademarks concerned and were sold in Canada in association with those marks by the defendant. It was held that notwithstanding the relationship between the plaintiff and its United States parent corporation, the evidence of use of the marks by the defendants in Canada showed a strong *prima facie* case of infringement which should be restrained by interlocutory injunction. This decision obviously raises interesting questions for American corporations doing business in Canada, either by themselves or by the intervention of a subsidiary Canadian corporation. If, of course, the United States corporation is the owner of the trademark in Canada, it cannot complain if its own goods, marked with its trademark, are purchased in the United States and imported into Canada. But, in the case where the trademark in Canada is owned by a subsidiary Canadian corporation, it will be seen from the judgment in the above action that the United States corporation's goods, although properly marked with the trademark in the United States, cannot be imported into Canada in infringement of the trademark owned by its subsidiary Canadian corporation".¹

To what extent Canadian drug companies have threatened trade mark infringement action against potential importers, we do not know. However the power to take such action must itself constitute an important deterrent to the importation of brand name drugs by independent distributors. Whether or not Canadian drug companies are in most cases actually owners of the trade marks or simply registered users would not appear to be significant, because the parent organizations presumably could transfer ownership of their Canadian trade marks to their Canadian subsidiaries if necessary.

The Canadian Federation of Agriculture claims that the protection provided under the Trade Marks Act adds to the cost of drugs, and that in the interest of bringing down drug prices no trade marks should be granted on prescription drugs in the future.² We do not believe that it is necessary at this time to go as far as the complete removal of trade mark protection for pharmaceuticals but we believe it may be desirable to modify the trade mark system as far as drugs are concerned.

One way of achieving such an objective would be to amend Section 20 of the Trade Marks Act to make it clear that no infringement could be claimed where the drugs in question are manufactured by a related company. Section 2 (r) of the Trade Marks Act designates related companies as "companies that are members of a group of two or more companies, one of which, directly or indirectly, owns or controls a majority of the issued voting stock of the others".

Such an amendment would to a large extent take care of the problem we are facing because it is usually exports by distributors in the United States which are presently excluded, and in nearly every case the parent

¹ *Canadian Patent Reporter*, Toronto: Canada Law Book Co. Ltd., January 1962, p. 192.

² The Canadian Federation of Agriculture, *op. cit.*, Submission to the Restrictive Trade Practices Commission, Regarding an Inquiry in Connection with the Manufacture, Distribution and Sale of Drugs, May 1961, p. 8.

manufacturing company in the United States and the subsidiary manufacturing company in Canada would be related companies within the meaning of the Act.

The effect of the proposal would be to make it possible for Canadian retailers or other bulk drug purchasers to purchase a drug from United States wholesalers or their distributors in cases where such drugs are protected by trade marks both in the United States and Canada and where Canadian prices were significantly higher than United States prices.

At present any Canadian firm, institution or individual buying such drugs in the United States might be facing a charge of infringement under the Canadian Trade Marks Act. United States parent companies could conceivably attempt to influence their distributors not to export to Canada. But if they were to attempt to do this, they would likely be running counter to the provisions governing restraint of trade in the United States.

Hence, the end result would be the encouragement to increasing competition between Canadian subsidiaries of United States parent companies and United States distributors exporting to Canada, with such competition likely to bring lower prices for Canadians of certain drugs protected under the Trade Marks Act probably, in the main, higher priced drug items.¹

TARIFFS

A few drugs may be imported into Canada duty-free but most are subject to various rates of duty. Certain drugs are dealt with specifically in the schedules to the Customs Tariff Act but the great majority of imports come under the general provisions. Single drugs of a class or kind made in Canada are dutiable under Tariff Item 711. Single drugs of a class or kind not made in Canada are dutiable under Tariff Item 208t. Combinations and mixtures of drugs are dutiable under Tariff Item 220. Details of these tariff items are given on the opposite page.

Since all of these are *ad valorem* duties rather than specific duties it is obvious that the value to be assigned to the imported product is of the highest importance. In order to protect Canadian manufacturers of goods of the same class or kind as those imported from being undercut by what might be considered unfairly low prices, the value for duty purposes must not be less than the fair market value in the country of origin. The fair market value is defined to be the price at which goods are sold in the same or substantially the same quantities for home consumption in the ordinary course of trade and under competitive conditions, to purchasers dealing with

¹ See Chapter 2, Recommendation 70.

Tariff Item		British Preferential Tariff	Most Favoured Nation Tariff	General Tariff
208t	All chemicals and drugs, n.o.p., of a kind not produced in Canada.....	Free	15%	25%
220	All medicinal and pharmaceutical preparations, compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, filled capsules, tablets, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n.o.p.			
	(i) When dry.....	17½%	25%	25%
	GATT (1/1/48).....	—	20%	—
	(ii) Liquid, when containing not more than two and one-half per cent of proof spirit.....	20%	40%	40%
	GATT (1/1/48).....	17½%	—	—
	GATT (6/6/51).....	—	20%	—
	(iii) All others*.....	60%	60%	60%
	GATT (6/6/51).....	—	25%	—
*	Any article in this item containing more than 40 per cent of proof spirit shall be rated for duty at per gallon..... and	\$3.00 30%	\$3.00 30%	\$3.00 30%
	Drugs, pill-mass and preparations, not including pills or medicinal plasters, recognized by the British or United States Pharmacopœia, the Canadian Formulary or the French Codex as officinal, shall not be held to be covered by this item.			
711	All goods not enumerated in this schedule as subject to any other rate of duty, and not otherwise declared free of duty, and not being goods the importation whereof is by law prohibited.....	15%	25%	25%
	GATT (1/1/48).....	—	20%	—

the vendor at arm's length who are at the same or substantially the same trade level as the importer. Obviously the determination of the fair market value may present considerable difficulties. The Restrictive Trade Practices Commission referred to the matter as follows:

" . . . Mr. J. S. Deachman [appraiser for the Department of National Revenue], in his evidence, pointed out that many drug manufacturing companies in Canada are subsidiaries of companies in the United States and may secure supplies of basic chemicals or processed drugs from the parent company. If the American company purchased a chemical in large quantities and then transferred a portion to its Canadian subsidiary, the valuation for duty would be based on the market price of the quantity supplied to the Canadian company. If a market price did not exist for such a quantity then the price per unit paid by the American company would be advanced by 5 per cent, for customs valuation purposes. If the chemical purchased by the American company went through a process of manufacture before being supplied to the Canadian subsidiary, the value for duty would be advanced up to 50 per cent to cover added material, labour and overhead. If the drug entered Canada as a finished product in bulk for packaging the valuation for duty would be the original cost of material increased by up to 75 per cent and if the product was imported in packages in finished form but unlabelled, for labelling in Canada, the advance in cost would be up to 100 per cent. Such valuations are made under section 38 of the Customs Act when there is no prevailing market price for the particular quantities or forms in which materials are supplied by the parent company in the United States to its Canadian subsidiary".¹

With respect to the matter of classifying a drug for tariff purposes there is of course no problem where the drug is specifically provided for under the tariff. When for purposes of classification it is necessary to interpret the meaning of "a kind not produced in Canada" this phrase is construed strictly. For example an imported chemical would have to be exactly the same chemical and of the same quality as the domestic production to be classified in the higher tariff category. When there is a question of the application of a dumping duty a much broader meaning is given to the word "kind".²

The Restrictive Trade Practices Commission examined in detail the significance of the dumping duty provisions in the tariff in relation to the drug industry. The Commission observed in part as follows:

"Dumping duties are applied to drugs which are considered to be of a class or kind made in Canada, when the price charged the Canadian importer is less than their fair market value in the country of origin. The amount of the duty is the difference between the two. When there is an established market for the imported drugs in the country of origin, the prices at which the drugs are sold in such market determine the fair market value. When there is no such market—e.g., when the drugs are imported as raw materials, or in a partly manufactured state, or unpackaged, or

¹ Restrictive Trade Practices Commission, *op. cit.*, p. 176.

² *Ibid.*, p. 175.

unlabelled, but sold in the country of origin as finished products only; or when they are sold in the country of origin to wholesalers or retailers only and imported as finished products by a Canadian manufacturing firm; or when the foreign exporter has manufactured or bought a very large quantity of the goods and the Canadian importer has bought a relatively small portion thereof—in all such cases the value for duty is determined in such manner as the minister of National Revenue prescribes under section 38 of the Customs Act.

"As shown in section 2 of Chapter IX and section 1 of Chapter XIX, the dumping duty provisions, when applied to dealings between parent and subsidiary companies, sometimes lead either to higher prices for drugs being charged in Canada than in the country of origin or to a distortion in the profit ratios of the companies concerned. This situation arises when a drug is sold in the country of origin to wholesalers or retailers only and imported as a finished product by the Canadian manufacturing subsidiary of the exporting company. In such a case, the fair market value is determined by prices to wholesalers or retailers in the country of origin and prices at the corresponding level will be higher in Canada than abroad to the extent of the mark-up taken by the Canadian subsidiary for its own operations. To the extent that the latter's mark-up is less than would normally be taken, the profit ratios of the parent and the subsidiary are distorted. Even in an extreme case where the latter operates at a loss, one would expect the over-all operations to be profitable and the profit realized by the parent to more than offset the loss taken by the subsidiary.

"The Commission was informed that dumping duties are seldom imposed on drugs. A United States company, not familiar with the Canadian dumping duty rules, might find a first shipment had been subjected to payment of dumping duty, but would never have its shipments caught a second time. The practice of most American companies, when they intend to supply some new drug products to their Canadian subsidiaries, is to approach the Canadian Customs Department, tell the facts and ask that the fair market value in the United States be fixed. The Canadian subsidiary is then charged a price which is at least as high as the determined fair market value and may well be higher than the price the Canadian subsidiary would have been charged in the absence of the dumping duty rules. When this is the case, the effect of the application of the dumping duty rules to imports of drugs is to put extra money into the pocket of the United States exporter, not into the Canadian Treasury.

"To what extent are Canadian manufacturers of ethical drugs, and more particularly of antibiotics and tranquillizers, actually protected by the dumping duty provisions. As shown in the Green Book (para. 112, page 63), the drug manufacturing industry in Canada is very largely in the hand of subsidiaries of foreign companies, of which the great majority are United States companies. Since the purchase of Frank W. Horner Limited by Carter Products Inc., Charles E. Frosst & Co. is the only independent Canadian firm at all comparable in size to any of the larger United States subsidiaries in this country. At the time of the hearings, very little manufacturing of basic antibiotic or tranquillizing drugs was done in Canada. The great majority of basic drugs of these kinds was imported, Canadian manufacturing being mainly confined to refining, preparing dosage forms and packaging

"For purposes of the dumping duty provisions, each group—the antibiotics and the tranquillizers—is considered as a class. As at least one tranquillizer, meprobamate, and one antibiotic, chloramphenicol, are made in Canada, all tranquillizers and antibiotics are subject to the application of the dumping duty rules, when imported in dosage forms. However, the

Commission was informed that antibiotics may be exempted when imported in bulk as basic drugs, if they are to be used in the manufacture of some pharmaceutical compounds not regarded as being of the same class or kind as any antibiotic manufactured in Canada.

"In view of the foregoing circumstances the Commission inclines to the view that, with respect to ethical drugs and more especially antibiotics and tranquillizers, the dumping duty rules may sometimes operate to increase the costs of some Canadian importers without giving any substantial protection to Canadian manufacturers".¹

We find that tariffs on drugs and on equipment used in the research, development and manufacturing of drugs add to the cost of drugs sold in Canada. Because of the marketing system which prevails in this country, the ultimate effect on prices is to multiply the impact on the consumer who has to purchase these drugs.

We believe that in the interest of lowering prices of drugs in Canada, while still maintaining high quality of pharmaceuticals a review is required of the appropriate tariff items as presently applied to drugs and to equipment used in research, development and manufacturing of drugs.

We are particularly concerned with those drugs that would be approved for inclusion in a national health plan, the cost of which would be borne in part by the consumer and in part by the taxpayer. We believe it should be part of the Government's policy to do everything it can to save money for both the taxpayer and the consumer thus serving the best public interest.

It may therefore be desirable for the Canadian Tariff Board to examine the whole area of tariffs on drugs and on equipment used in research, development and manufacturing of drugs with a view to establishing which tariffs covering what items can be reduced or removed without causing serious injury to established reputable drug manufacturing firms in Canada. Administrative arrangements affecting 'anti-dumping' regulations as they apply to drugs may also have to be reviewed.²

OTHER LEGISLATION

The sale and distribution of drugs are controlled by specific federal and provincial legislation which overlaps to some extent. The basic distinction between the two is that provincial legislation deals primarily with druggists and drug stores while the federal legislation deals primarily with drugs. The three more important pieces of federal legislation are the Food and

¹ *Ibid.*, pp. 505-507.

² See also Chapter 2, Recommendation 72.

Drugs Act, the Opium and Narcotics Control Act, and the Proprietary or Patent Medicine Act. The last-mentioned Act does not relate to prescription drugs and we therefore do not deal with it. The other two Acts are referred to later on insofar as they relate to complaints received by this Commission.

Legislation dealing with the practice of pharmacy and regulating the handling and sale of drugs varies among the provinces. The basic purpose of the provincial pharmacy acts is to establish the professional qualifications required of practising pharmacists and to channel the compounding, dispensing and sale of drugs and medicines of certain kinds through drug stores or hospitals.

Each provincial act says that "except as otherwise provided" no one except a pharmacist may dispense prescriptions.¹ Exemptions are usually made so that medical practitioners, dentists and veterinary surgeons may dispense prescriptions for their own patients. The provincial acts prescribe the academic courses and the examination and apprenticeship requirements for registration as druggists within the province. Usually provincial legislation sets up a body of pharmacists to govern the practice of pharmacy in the province subject to the general requirements of the legislation. In some provinces there are in addition to the governing body, separate trade associations operating either locally or in a province-wide basis. Even where there is a separate province-wide trade association, the official governing body performs a dual function. It carries out its statutory duties of licensing pharmacists and so on, but it also concerns itself with the economic welfare of the druggists as businessmen, a typical trade association activity. Both the Director of Investigation and Research under the Combines Investigation Act,² and the Restrictive Trade Practices Commission expressed concern about a conflict of interest where the same body performs the two functions. It is not difficult to visualize a conflict arising between a governing body's concern with professional standards and its concern with price competition. The possibility of conflict becomes clearest perhaps in the area of control exercised by members of the profession over the conditions of entry of new competition. In Ontario for example no person may operate a drug store unless he is a registered pharmaceutical chemist or, if a corporation, unless the majority of the directors are pharmaceutical chemists and, in addition, unless the majority of each class of shares is owned by and registered in the name of pharmaceutical chemists. Obviously this would prevent most corporations, including chain and department stores, from operating pharmacies themselves.³

¹ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

² Green Book, pp. 10-11.

³ *Ibid.*, p. 9.

In addition to setting up in effect a licensing system for the profession of pharmacy, provincial pharmacy acts also provide for certain restrictions on the sale of drugs. For present purposes we may say that three main kinds of drugs are affected. There is first of all a group of drugs which may be sold only on prescription. This group includes all drugs restricted by federal legislation to distribution by medical prescription. It also includes additional drugs which provincial authorities believe require the safeguard of medical prescription for distribution. This additional group of drugs varies among provinces. A second main group of drugs may be sold only to persons known to the registered pharmacist and for which the purchaser must sign in a sales register maintained for the purpose. This group of drugs is usually referred to as the poison schedule. The third main group of drugs is made up of those pharmaceutical preparations which may be handled only by a registered pharmacist but in respect of which over-the-counter sale is permitted.¹

The Government of Manitoba brought to our attention that the regulations as presently administered by the Narcotics Control Act and the Food and Drugs Act are creating difficulties for hospitals in dispensing prescribed drugs. We quote:

"... the costs of Medicare prescriptions filled by hospital and retail pharmacies are substantially different. Although the hospital enjoys certain purchasing privileges by comparison with the retail pharmacies, it is considered that these do not adequately explain the difference between the average hospital prescription cost of \$1.58 and the average retail pharmacy prescription cost of \$2.82 and \$3.07. It is obvious that savings can be effected by the Government if recipients of Medicare are encouraged to have their prescriptions filled at the general hospital pharmacies. This practice is hampered, however, by regulations under the Narcotic Control Act and the Food and Drugs Act which prohibit hospital pharmacies from filling prescriptions containing a narcotic or a controlled drug. Not only are these prescriptions eliminated, but recipients of Medicare tend to turn to the retail pharmacies as they become aware of the limited service which the hospitals are permitted to provide."²

The Manitoba Government has suggested that we may make the following recommendation: "*The Food and Drugs Act and the Narcotics Control Act be amended so that, with suitable controls, hospital pharmacies may be permitted to fill Medicare prescriptions containing narcotics and controlled drugs*".³ We are in general agreement with this recommendation and we say so in Chapter 2.⁴

¹ Department of National Health and Welfare, Research and Statistics Division, *op. cit.*

² The Government of Manitoba, *op. cit.*, p. 49.

³ *Ibid.*, pp. 49 and 50.

⁴ See Chapter 2, Recommendation 79.

VOLUNTARY PRICE RESTRAINT

We have made the point earlier that expenditures on drugs in many institutions may place a heavy burden on those families that are hit hard by protracted illness or special diseases requiring high priced drugs. Our views, however, are not shared by the Canadian Pharmaceutical Manufacturers Association as indicated in a statement issued by the Association to the effect that prices of Canadian-made drugs are in line with the Canadian worker's purchasing ability and the economy of the country.¹

In our view drug prices should be as low as possible taking into account quality and reasonable costs of production and distribution of drugs in Canada. Hence we feel that it should be part of the industry's objective to do all it can to achieve economies in the production and distribution of drugs as will assist the industry to bring drug prices in Canada more in line with drug prices prevailing in other industrialized nations while still assuring satisfactory quality.

In discussing patents affecting drugs earlier in this chapter we have suggested that the Canadian Government may serve notice to the drug industry that it expects the industry to make earnest efforts over the next five years aiming at a reduction of drug prices to levels more comparable to those prevailing in other industrialized countries and more acceptable to the Canadian public where this can be done through more efficient production and distribution without affecting the quality of pharmaceuticals used in Canada. We have made the additional point that if a national drug programme were implemented in Canada, efforts at price reduction by the industry would become essential in order not to burden such a plan with excessive and unnecessary costs.

To this end we would suggest that the drug industry in Canada consider the possibilities of a programme of voluntary restraint of drug prices. Such a programme has been tried with great success by the pharmaceutical industry in the United Kingdom.

In June, 1957, the British Ministry of Health worked out an arrangement with the pharmaceutical industry designed to achieve price regulations of drugs by voluntary effort on the part of the industry. The plan ran for three years on a trial basis. Its main features included:

- "(i) If any preparation had substantial exports (20 per cent or more of output) the home price should be no more than the export price;
- "(ii) If any preparation which was not substantially exported had an exact standard equivalent, its price should be no higher than that of the equivalent;

¹ Statement by the Canadian Pharmaceutical Manufacturers Association, as reported in *The Globe and Mail*, Toronto, November 9, 1963.

- "(iii) For other preparations, the maximum price should be calculated by the specially constructed trade price formula. This formula added to an allowance nominally related to the cost of basic ingredients certain additional allowances called on-cost and processing and packaging allowances and provision for wholesalers' discount to make up the total price;
- "(iv) Any manufacturer was free to negotiate a price separately with the Health Departments if he considered the appropriate formula price unsuitable or if for any reason none of the formulae was applicable; other features of the scheme are
 - (a) The "undertaking"
 - "(v) Because the prices arrived at by using the formulae were sometimes higher than current prices, the Association of the British Pharmaceutical Industry gave an undertaking that when this was so the current prices would not be increased except where an increase was justified by an increase in costs;
 - (b) The "three years freedom"
- "(vi) The scheme would apply to a preparation only after it had been on the market for three years (for those three years the price would be at the manufacturers' discretion).
The whole scheme would be on trial for three years, after which the Health Departments and the Association of the British Pharmaceutical Industry would be free to consider it in the light of experience."¹

The Hinchliffe Committee reviewed the effectiveness of the programme in 1959 and it concluded that the trial effort had proven to be very successful both in the interest of the industry and the public at large resulting in substantial financial savings to the British taxpayer as far as the drug programme was concerned.

The Hinchliffe Committee concluded: "In our view this scheme is a very valuable contribution, enabling a business arrangement to replace the ordinary operation of supply and demand, which is impracticable in this field. It is a considerable step forward in our view that the industry should recognize and accept the need for price regulation."² The voluntary programme of price restraint with respect to drugs has been continued in a modified manner.³

Methods of drug distribution and the institutional arrangements prevailing in Canada are quite different from those applying to the United Kingdom. Still, the Canadian drug industry might find it useful to examine the experiences and the methods used by the pharmaceutical industry in the United Kingdom with a view to ascertaining whether some of the lessons learned might be adapted to the Canadian situation. Such a study might be sponsored jointly by the drug industry and the Canadian Government,

¹ Final Report of the Committee on *Cost of Prescribing*, *op. cit.*, pp. 69-70.

² Final Report of the Committee on *Cost of Prescribing*, *op. cit.*, p. 70

³ This modified programme came into operation in January 1961, to be in force to June 30, 1964. Great Britain, *Ministry of Health, Report, 1960*, Part I, Health and Welfare Services, "Command Paper 1418". London: H.M.S.O., 1961, p. 75.

assisted by the Drug Advisory Committee, and such provincial governments as wish to participate, and form the basis of possible proposals of a voluntary drug price restraint programme that might be developed in Canada over the next five years.¹

We emphasize that we consider any efforts to evolve a system of voluntary price restraint with respect to drugs that would specifically meet Canadian requirements as a supplement to action that should be taken by governments along lines suggested earlier in this chapter and specified in Chapter 2.²

¹ See Chapter 2, Recommendation 73.

² See Chapter 2, Recommendations 64-72.

Health Insurance and Government Action

OBJECTIVES AND METHODS OF HEALTH INSURANCE

As we outlined in Chapter 10, the issue of how to pay for health services has been a public concern since World War I. An important part of the issue was resolved in 1957 when hospital insurance on a universal basis became a joint responsibility of federal and provincial governments.

The question of prepaying medical services was at once the least controversial and the most controversial issue to be argued before the Commission. There was almost complete agreement that medical insurance should be available to all. As spokesmen for the Canadian Medical Association stated, "Insurance to prepay the costs of medical services should be available to all regardless of age, state of health, or financial status".¹ There was also near unanimity among spokesmen for "consumer" groups, Trans-Canada Medical Plans, the insurance industry, and for the health professions, that some form of government action was necessary to bring about the desired objective. But at the same time, there was strong disagreement as to the method and the scope of government action required.

It is unfortunate that the heavy emphasis on the payment for services of physicians and surgeons, frequently referred to as "medicare", tended to obscure the importance of extending any programme to include the whole spectrum of health services.

The Commission is of necessity concerned not only with medical services, but with all health services. Others share this concern. This was also evident in the briefs presented to us and in our hearings. But again there was disagreement as to the method and scope of government action. The many submissions on the question of how to provide and pay for health services consisted of three related though basically different approaches: (1) an insurance approach, (2) a prepayment approach, and (3) a health services approach.

¹ *The Canadian Medical Association*, brief submitted to the Royal Commission on Health Services, Toronto, May 1962, p. 79.

Insurance Approach

This approach is best exemplified by the indemnity contracts sold by commercial insurance companies. The contract is between the company and the insured person who is paid a specified sum in the event of receiving medical or surgical services as specified in the contract. Usually, the patient bears part of the cost in the form of a "deductible" or "co-insurance". There is no direct relationship between the insurance company and the providers of services.

The contract is exclusively between the insurance company and the consumer of services, for the purpose of assisting him in paying part or all of the medical or surgical (and sometimes other) bills he may incur. It is not the function of the company, as such, to be concerned principally with the supply of health resources.

Under this approach the population falls by definition into two groups:¹

- (1) the "insurable" (those who represent risks acceptable to the insurer) and
- (2) the "non-insurable" (the chronically ill, the physically handicapped, and the aged, or those who represent abnormal risks).²

The *insurable* group must be divided, again, into two groups:

- (1) those who can pay the necessary premiums from their own resources, and
- (2) those who cannot pay all or any part of the premiums and who must, therefore, be subsidized, presumably by government.

Prepayment Approach

This approach is exemplified in the "service" contracts of the medical profession-sponsored prepayment plans. Except in those plans permitting "extra-billing" there are usually few, if any, financial transactions between the patient and his physician; the prepayment plan pays the physician directly on a fee-for-service basis. Here, again, the prepayment approach is not specifically concerned with the availability of services.³ Like the commercial insurance agency, it leaves the question of availability of health resources to the operation of the market.

¹ For a more detailed analysis, see Berry, C. H., *Voluntary Medical Insurance and Prepayment*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964, Chapter 3.

² Coverage for this group can be obtained in many instances but at a price which only a relatively few can pay.

³ Prepayment plans do make physicians' services available on a less onerous financial basis but they are not primarily concerned in assuring an adequate supply of physicians where deficiencies exist.

Because of prepayment, of course, the effective demand for services is expanded and more physicians are likely to be attracted to areas where a large volume of coverage is in effect.¹ Although the "service" plans do not make quite the same distinction between "insurable" and "non-insurable" persons in enrolling individuals not in groups, they have imposed age limitations and waiting periods to guard against an adverse selection of risks. These have been reduced in recent years.²

Again, the population must be divided into two groups:

- (1) those who can pay the full premiums from their own resources, and
- (2) those who will require subsidy, presumably by government.

Health Services Approach

This approach, advocated chiefly by consumer groups, emphasizes that the market is not a satisfactory mechanism for determining availability of and access to health services. These groups emphasized that, just as with hospital care, the resources of the nation must be so planned and organized that they can be used to provide all health services where they are needed to raise the level of health of the entire nation. They urged broader objectives including preventive services, drugs, dental services, and home care, as well as provision for the financial consequences of illness or injury.

In this approach, the question of insurability or non-insurability of people is not a factor. All citizens should be covered and those considered non-insurable by voluntary insurance standards need coverage more than anyone else. The tax structure is the device to bring the direct costs of health insurance within the capacity of all citizens to pay.

Scope of Government Action

In addition to differences about objectives and the methods of achieving them there is also the question of the role of government in the area of health services. Specifically this question has come up in two forms, the nature of public subsidies and compulsory participation in health care programmes.

Two approaches have been presented in the area of public subsidies. The first specifies that government funds should be used to *subsidize family heads or individuals* who need help to enable them to pay premiums to the insurance company or prepayment plans. That is, after setting a premium that would cover the costs of providing medical care for all citizens, individuals who cannot afford this premium must be identified and certified for assistance through some form of means test.

¹ One example of this effect is the Swift Current Medical Plan, where the introduction of universal insurance resulted in a near doubling of the supply of physicians.

² See footnote 2, p. 724.

The alternative approach specifies that the programme should be sponsored by governments and that general tax revenues be used to *subsidize an insurance fund*, so that premiums may be brought within the reach of nearly all, or removed completely as in those provinces financing their hospital insurance programmes from general revenue or sales taxes. A means test would not be necessary except for those in receipt of general welfare payments. If it were to be extended to more than these groups the process of means testing would present problems because of the number and classes of persons involved.

There are two questions, therefore, that arise from these alternatives; the first is a question of principle, and the second a question relating to the size of the task. There is disagreement on both of these. First, some groups, e.g., the medical profession,¹ the Insurance Companies,² and the Canadian Manufacturers' Association,³ support the means testing of individuals who require assistance. Spokesmen for consumer groups, those who would, in fact, be among those subject to means testing, are opposed. These include the Canadian Federation of Agriculture⁴ and the Canadian Labour Congress,⁵ both of whom object to the stigma of a means test, to the lack of equality in its application, as well as to the administrative costs. Second, there is disagreement as to how many Canadians must be means-tested. The Canadian Medical Association⁶ suggests nearly 3,000,000, for medical care alone. Others believe it will be more.

In the area of compulsory participation in the Federal-Provincial Health Services Programme again there are contrasting opinions. The necessity for such legislation is accepted and approved by those representing consumers and opposed by those representing the physicians and dentists, the prepayment plans, and the insurance industry.

In evaluating these approaches the points of issue then appear to be three:

1. The ability of voluntary insurance to provide universal comprehensive coverage.
2. The problems of subsidy including the number of persons requiring a means test.
3. The issue of compulsion.

We examine various aspects of these points below.

¹ *The Canadian Medical Association, op. cit.*, p. 87.

² *Canadian Health Insurance Association*, Supplementary Submission to the Royal Commission on Health Services, Toronto, 1962, p. 54.

³ *The Canadian Manufacturers' Association, op. cit.*, p. 8.

⁴ *The Canadian Federation of Agriculture, op. cit.*, p. 11.

⁵ *Canadian Labour Congress, op. cit.*, p. 25.

⁶ *The Canadian Medical Association, The Cost and Ability to Pay for Medical Services Insurance in Canada and Its Provinces*, Department of Medical Economics, Toronto 1962, p. 22.

ABILITY OF VOLUNTARY INSURANCE TO PROVIDE
UNIVERSAL COMPREHENSIVE COVERAGE

The first issue relates to the ability of voluntary insurance to provide universal coverage, and the costs involved. For this purpose, it is necessary to examine carefully the numbers of persons insured, amount and kinds of coverage now held, benefits provided, and the costs of providing insurance protection. It should be emphasized that, except for those having "major medical" contracts, we are dealing here almost exclusively with medical services alone, and not the full range of health services.

Number of Persons Insured

Precisely how many people are insured for health services?

From the data in Table 18-1, and the data in Chapter 10 the following statements can be made:

- (1) Out of a total of 18.2 million Canadians in 1961 approximately 10.7 had some form of medical insurance or prepayment coverage. These included:

	'000
(a) Commercial insurance and prepayment plans (relatively complete medical and surgical in and out of hospital).	4,776
(b) Commercial insurance and prepayment plans ¹ (major medical—relatively complete coverage all health services except dental)	1,871
(c) Commercial insurance and prepayment plans (limited benefits), ²	2,978
(d) Recipients of Public Assistance	500
(e) Armed Services, RCMP, Indians, Eskimos, and institutional	500
(f) Swift Current Health Region	50
Total	10,675

- (2) Over 7.5 million Canadians did not have any medical care insurance whatever.

¹ Excludes major medical contracts designed to supplement other more basic medical and surgical contracts. These are included in (c). The consequences of this adjustment would be that in 1961 a total of 1.3 million persons shown under (c) had relatively complete coverage.

² This includes an undetermined number holding supplementary major medical benefits.

TABLE 18-1 NUMBER OF PERSONS WITH MEDICAL INSURANCE AND/OR PREPAYMENT CONTRACTS, INDIVIDUALS AND DEPENDANTS, BY TYPE OF COVERAGE AND CLASS OF CARRIER, CANADA, 1961

Class of Carrier	Type of Coverage						
	Surgical Benefits Only (1)	Medical Care Only (No Surgery) (2)	Surg. Pro-cedures and In-Hospital Medical Care (3)	Surg. Pro-cedures and Medical Care in Hospital, Clinic, Home, Office (4)	Major Medical Expense Comprehensive or Basic (5)	Major Medical Expense Supplementary (6)	Total Excluding Major Medical Supplementary (7)
<i>Group Contracts</i>							
Stock Companies							
Individuals.....	68,735	327	175,839	285,066	128,950	174,927	658,917
Dependants.....	114,522	642	317,756	526,772	236,592	321,742	1,196,284
Total.....	183,257	969	493,595	811,838	365,542	496,669	1,855,201
Mutual Companies							
Individuals.....	85,653	8,181	125,906	98,024	398,257	198,140	716,021
Dependants.....	149,122	14,674	230,915	149,948	1,014,694	268,878	1,559,353
Total.....	234,775	22,855	356,821	247,972	1,412,951	467,018	2,275,374
Fraternal & Co-operatives							
Individuals.....	9,964	—	1,719	3,891	4,514	6,267	20,088
Dependants.....	18,092	—	2,738	5,044	9,601	13,005	35,475
Total.....	28,056	—	4,457	8,935	14,115	19,272	55,563
Prepayment Plans							
Individuals.....	4,173	169	403,891	968,714	—	121,244	1,376,947
Dependants.....	7,385	307	627,292	1,836,074	—	190,618	2,471,058
Total.....	11,558	476	1,031,183	3,044,555**	—	311,862	4,087,772**
All Group Contracts							
Individuals.....	168,525	8,677	707,355	1,355,695	531,721	500,578	2,771,973
Dependants.....	289,121	15,623	1,178,701	2,517,838	1,260,887	794,243	5,262,170
Total.....	457,646	24,300	1,886,056	4,113,300**	1,792,608	1,294,821	8,273,910**

Non-Group Contracts									
Stock Companies									
Individuals.....	18,433	773	16,456	66,324	5,898	442	107,884		
Dependants.....	23,977	783	20,892	128,250	8,079	480	181,981		
Total.....	42,410	1,556	37,348	194,574	13,977	922	289,865		
Mutual Companies									
Individuals.....	38,890	4,330	37,376	8,324	21,154	351	110,074		
Dependants.....	37,409	3,460	33,133	7,030	24,977	311	106,009		
Total.....	76,299	7,790	70,509	15,354	46,131	662	216,083		
Fraternal & Co-operatives									
Individuals.....	10,257	1,582	12,657	6,095	6,371	4,945	36,962		
Dependants.....	20,395	3,796	5,998	3,673	11,983	8,194	45,845		
Total.....	30,652	5,378	18,655	9,768	18,354	13,139	82,807		
Prepayment Plans									
Individuals.....	—	11,041	135,559	157,587	—	—	304,187		
Dependants.....	—	7,569	164,834	228,368	—	—	400,771		
Total.....	—	18,610	300,393	442,769**	—	—	761,772**		
All Non-Group Contracts									
Individuals.....	67,580	17,726	202,048	238,330	33,423	5,738	559,107		
Dependants.....	81,781	15,608	224,857	367,321	45,039	8,985	734,606		
Total.....	149,361	33,334	426,905	662,465**	78,462	14,723	1,350,527**		
Total Group and Non-Group Contracts									
Individuals.....	236,105	26,403	909,403	1,594,025	565,144	506,316	3,331,080		
Dependants.....	370,902	31,231	1,403,558	2,885,159	1,305,926	803,228	5,996,776		
Total.....	607,007	57,634	2,312,961	4,775,765**	1,871,070	1,309,544	9,624,437**		

**"Individuals" are here defined as contract (or group certificate) holders.

**Total includes 1960 coverage reported by Group Medical Services and Medical Services Incorporated, Saskatchewan. Coverage of these two plans was not available separately for contract holders and dependants. The total shown exceeds the number of individuals and dependants for this reason.

SOURCE: Berry, C. H., *Voluntary Medical Insurance and Prepayment*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964, Table 2-1.

Adequacy of Coverage

Although 10,675,000 Canadians had some form of medical insurance or prepayment coverage, the question still remains, how adequate is this coverage in protecting against the costs of medical care.

Table 18-2 summarizes the claims paid on behalf of insured persons, and the average claims paid per person covered, from which an assessment of adequacy of coverage can be made.

These statements of average claims paid per person covered need to be examined in the light of actual medical requirements. A study prepared for the Commission¹ revealed that in 1961, expenditures made by the Canadian population for physicians' services averaged \$21 per capita. The expenses incurred by those persons having insurance or prepayment coverage can be shown to be higher, probably about \$25 per capita. Although available estimates are crude, the data suggest that those without insurance or prepayment averaged about \$15 per capita.

The Commission's studies also indicate that a reasonable estimate of medical expenses are \$27 per capita for persons covered by the prepayment plans and \$23.50 for those insured by the commercial carriers.²

Table 18-2 also contains a comparison of the average total claims paid out per capita, as reported by commercial carriers and prepayment plans, with the estimates of per capita medical expenses, including a statement of the percentage of these expenses paid by existing coverage. It will be noted that the prepayment plans rank high, paying, on the average, an estimated 80 per cent of all expenses for physicians' services incurred by their subscribers.

This is substantially more than the proportion of these services paid for by either stock or mutual companies. The lower average claims paid by the insurance companies reflect the presence of deductibles, and co-insurance factors, as well as limited coverage and benefits. The higher average payments made by the prepayment plans reflect their success in the introduction of relatively complete "first dollar" coverage.

The data show, for all carriers combined, there was an appreciable difference between group and non-group contracts in terms of average claims paid per person covered in 1961. There were also major differences between group and non-group contracts for certain classes of carrier. For stock companies, the average non-group claim is just over one-third that paid on behalf of persons insured under group contracts. The

¹ Berry, *op. cit.*, Chapter 4.

² For the extensive analysis supporting these estimates, see *Ibid.*, Chapters 4-6.

**TABLE 18-2 AVERAGE CLAIMS PER CAPITA AS PERCENTAGE OF
ESTIMATED TOTAL EXPENSE FOR PHYSICIANS' SERVICES,
CANADA, 1961**

Type of Carrier	Estimated Coverage (Persons)	Estimated Per Capita Expense For Physicians' Services	Reported Claims Paid Out Per Capita	Claims as Percentage of Estimated Total Expense
	Number	\$	\$	%
Stock Companies				
Group.....	1,855,201	23.50	14.49	61.7
Non-group.....	289,865	23.50	5.04	21.4
Mutual Companies				
Group.....	2,275,374	23.50	15.29	65.1
Non-group.....	216,083	23.50	10.71	45.6
Co-operatives and Fraternal Organ- izations				
Group*.....	55,563	23.50	5.77	24.6
Non-group.....	82,807	23.50	6.28	26.7
Prepayment Plans				
Group.....	4,087,772	27.00	21.51	79.7
Non-group.....	761,772	27.00	21.94	81.3
All Carriers				
Group.....	8,273,910	25.35	18.40	72.6
Non-group.....	1,350,527	25.47	15.41	60.5
No Carrier (uninsured).....	8,613,563	15.48	(NIL)	0.0
Total Canadian Population.....	18,238,000	21.01	8.94	42.6

*Based on returns from four carriers.

SOURCE: Berry, C. H., *Voluntary Medical Insurance and Prepayment*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964.

twenty-one per cent of total physicians' services paid by these companies under non-group contracts does not in our view, constitute adequate protection. In mutual companies a similar situation prevails; only forty-five per cent of estimated medical costs are paid by these non-group contracts. Such contracts, although providing a greater degree of protection, are still inadequate.¹

¹ Because of the limited data available on co-operatives and fraternal organizations it would be unrealistic to draw conclusions concerning adequacy of protection on the basis of the percentage of total physicians' services paid for by these organizations under group and non-group contracts.

Cost of Insurance

The purpose of insurance or prepayment is to remove from the individual the risk of having to meet part or all of his own health expenditures. This can only be done at some cost—the cost of collecting and administering premiums and paying claims. The cost of insurance then becomes the difference between premiums paid in and claims paid out.

In the case of the prepayment plans, the difference between premiums and claims represents acquisition costs, administration costs and reserves. With the commercial insurance companies, it represents acquisition costs, administration costs, reserves, taxes and profits. Usually, this ratio of claims paid out to premiums received is referred to as the “loss ratio”. However, because the consumer is primarily concerned with health services, the critical ratio is that of acquisition, administration and other costs to actual expenditures on services. How much, for example, must be added to the basic cost of medical services for the advantages of insurance or prepayment? This figure we now call the “retention figure”, and the proportion the “retention ratio”. The 1961 data for Canada are shown in Table 18-3.

These data and comparisons are highly enlightening. They show that, in 1961, the insurance and prepayment systems paid on behalf of 9.6 million Canadians, medical bills, and in some cases some related other bills, totalling \$175,122,600, an average of \$18.20 per person. For this purpose and for the advantages of insurance, these 9.6 million Canadians paid in premiums \$224,093,200 or an average of \$23.28 per person.¹ The retention figure—i.e., the costs of administration, acquisition of new groups or individuals, commissions, taxes and profits,—totalled \$49 million, or an extra 28 per cent added to the amount of the payments for medical services.

The retention figure is highest among the commercial companies, reaching 38 per cent for group contracts, but rising to 151 per cent for non-group contracts sold to individual purchasers. This latter figure means that for each dollar of protection, the individual would have paid \$2.51 in premiums. By contrast, the prepayment plans actually paid a higher proportion of premiums for medical services on behalf of non-group subscribers than of group subscribers, with retention figures of 11 per cent and 18 per cent, respectively. The retention figures for commercial carriers covering group and non-group contracts was 44.3 per cent and the corresponding figure for prepayment plans was 17.6 per cent.

¹ See Table 18-3.

TABLE 18-3 TOTAL AND PER CAPITA PREMIUMS, CLAIMS AND RETENTION FIGURE, AND RETENTION FIGURE AS PERCENTAGE OF CLAIMS BY TYPE OF ORGANIZATION AND CLASS OF CONTRACT ISSUED, CANADA, 1961

Type of Carrier	Total Premiums	Premium Per Capita	Total Claims	Claim Per Capita	Retention Figure	Retention Per Capita	Retention Ratio
	\$'000	\$	\$'000	\$	\$'000	\$	%
<i>Group Contracts</i>							
Stock Companies.....	41,590.0	22.42	30,679.5	16.54	10,910.5	5.88	35.6
Mutual Companies.....	43,407.4	19.08	31,387.0	13.79	12,020.4	5.28	38.3
Co-operatives and Fraternal Organizations.....	251.8	4.53	205.4	3.70	46.4	.83	22.6
Prepayment Plans.....	109,174.4	26.71	92,118.5	22.54	17,055.9	4.17	18.5
<i>Non-group Contracts</i>							
Stock Companies.....	6,667.9	23.00	2,648.8	9.14	4,019.1	13.87	151.7
Mutual Companies.....	6,127.8	28.36	3,035.8	14.05	3,092.0	14.31	101.8
Co-operatives and Fraternal Organizations.....	709.9	8.57	542.4	6.55	167.5	2.02	30.9
Prepayment Plans.....	16,164.0	21.22	14,505.2	19.04	1,658.8	2.18	11.4
<i>All Contracts</i>							
Group.....	194,423.6	23.50	154,390.4	18.66	40,033.2	4.84	25.9
Non-group.....	29,669.6	21.97	20,732.2	15.35	8,937.4	6.62	43.1
TOTAL.....	224,093.2	23.28	175,122.6	18.20	48,970.6	5.08	28.0

SOURCE: Based on Table 18-1, and Berry C. H., *Voluntary Medical Insurance and Prepayment*, a study prepared for the Royal Commission on Health Services, Ottawa: Queen's Printer, 1964, Table 4-1 minus accident and sickness premiums and claims, but including hospitalization insurance, with adjustments noted in his Chapter 4, with reductions for (a) premiums returned, (b) dividends credited to policy owners and (c) increases in unearned reserves and advance premium accounts, estimated at 7.3%, 4.5%, 6.1% and 0.6% for stock companies, mutual companies, co-operatives and fraternal organizations, and pre-payment plans respectively.

PROBLEMS INVOLVED IN SUBSIDIES

In Chapter 4, we indicated that there was a substantial number of Canadians who, by any measure, had low incomes; incomes that were too low to enable them to purchase the health insurance they needed. There is little, if any, disagreement with these findings and all groups agree that public funds will be required if the proportion of the population who cannot independently afford it, are to receive the protection they require.

What is at issue is the type of subsidy and here the numbers of persons requiring a subsidy becomes an important factor.

The number requiring subsidy depends on two variables: (1) the total cost of the item or items of health services being insured, and (2) distribution of incomes of various levels. In the submissions of the insurance industry, Trans-Canada Medical Plans, and the Canadian Medical Association, only the premiums for physicians' services (medical, surgical and obstetrical) are considered.¹ The second variable is a subjective one, requiring a judgment as to the income level below which subsidy is considered to be necessary. In the submission of spokesmen of the insurance industry, the cut-off point or "threshold" is suggested to be where the income tax exemptions provisions place it now, i.e., at \$1,000 for single persons and \$2,000 for family heads, rising by \$300 for each dependant receiving family allowances and \$550 for other dependants. Using these criteria, the Department of Medical Economics of the Canadian Medical Association estimates that 2,950,000 persons would require partial assistance for medical services alone.² Part of the case for selecting the income tax exemption level as the threshold point rests on a sample survey of insurance coverage in British Columbia and Alberta sponsored by the respective provincial divisions of the Canadian Medical Association. These revealed that approximately one-half of non-income tax payers were insured either through their medical welfare programme (25%) or through private insurance (25%).

Ignoring the problem of whether the experience of British Columbia and Alberta is typical of the experience of a province like Newfoundland or the Maritime Provinces, these surveys emphasize the point at issue; that is, what health services should a subsidy be related to? In calculating the numbers requiring subsidy the above approach concentrated only on the ability to finance a medical care premium. It should be noted that in both these provinces there are no premiums for the hospital services programme,

¹ The Canadian Medical Association brief does suggest an additional \$10 annual subsidy for prepaying drug costs for those in receipt of public assistance, *op. cit.*, p. 84.

² The Canadian Medical Association, Department of Medical Economics, *op. cit.*, p. 22.

although there are direct payments at the time of service. Could one-quarter of the non-tax-paying group have afforded the Alberta Medical Plan premiums of \$63 (single) or \$159 (family) if there had been a \$25.20 (single) or \$50.40 (family) hospital insurance premium as, say in Ontario?¹ Could they have done so and still purchased other health items such as drugs, glasses, hearing aids etc.?

An alternative approach to the problem of estimating the number of Canadians requiring subsidy clearly is required. Accordingly, we have calculated the costs of the total premium required to pay for the full range of health services in 1961 on a prepayment basis and compared this with some estimates of Canadian income.

The estimate of the total premium for medical care and surgical care, hospital care, as well as for dental care, drugs, optical services and nursing care is presented in Table 18-4 with the method of calculation indicated in the footnotes.

TABLE 18-4 ACTUAL AND ESTIMATED COSTS OF PREMIUMS FOR HEALTH SERVICES, 1963

	Single	Family
Hospital Services*	\$ 25.20	\$ 50.40
Medical Services**	63.40	159.00
Dental†	12.50	46.25
Drugs††	18.00	66.60
Others*	6.30	23.35
TOTAL	125.40	345.60

* The Ontario Hospital Services premiums in 1963, which were raised in 1964 to \$39 and \$78.

** The premium approved in 1963 for the Alberta Medical Plan. The figure for single coverage of \$63.40 compares with an estimate of between \$22.39 and \$23.06 in 1961 referred to in the Interim Report of the Advisory Planning Committee on Medical Care to the Government of Saskatchewan, Regina, September 1961, p. 75. The actual costs of the medicare programme in Saskatchewan per capita, during its first full year of operation in 1963 was \$22.05. For an even higher suggested premium than for the Alberta Medical Plan, see the suggested premium structure proposed by the Canadian Health Insurance Association in its Brief to the Medical Services Enquiry of Ontario, January 29, 1964, p. viii.

† The per capita cost of dental services with a ratio of one dentist to 2,000 people.

†† The current premium experience of Prescription Services Incorporated of Windsor Ontario.

*Actual expenditures are taken from the National Accounts. Non-prescribed drugs are not included.

¹ See footnotes to Table 18-4.

The total family premium in 1963 for the full range of health services is therefore estimated to be approximately \$346 per year,¹ and for the single income earner, \$125 per year.

We have examined the use of income tax exemptions as the dividing line between those who need assistance in financing health services and those who do not, and we find that this is an unsatisfactory method because it omits more persons than it covers. We have concluded that we should base our judgment on actual recent experience, on the proportion of income that an individual or family head can reasonably be expected to allocate continuously to health services.

According to a recent family expenditure survey,² the percentage of income typically allocated to health services averages for each income level was approximately four per cent. We believe that, with all services financed on a regular premium basis, this percentage could be increased; but not, we believe, to more than seven per cent, which would be a higher percentage than is paid in any other western nation. For this calculation; therefore, we have used three alternative rates: five per cent, six per cent and seven per cent.

On the first assumption that no one should pay more than 5 per cent, a single person earning \$2,500 or more and a family head earning \$6,900 or more would be able to meet his premium (\$125 or \$345) in full. All those earning below these respective amounts would be entitled to some amount of subsidy.

On the second assumption (6 per cent) a single person earning \$2,090 a year or more and a family head earning \$5,760 or more would need no assistance, but all those earning less would be entitled to subsidy.

On the third assumption (7 per cent) the respective amounts would be \$1,790 and \$4,930, and those earning less than these amounts would be entitled to subsidy. Not all of these would request assistance, but all would be entitled.

In endeavouring to arrive at an estimate of the number of family heads and individuals requiring subsidy who fall into these categories we are handicapped somewhat by lack of complete data on incomes. The data we do have, have already been described in Chapter 4 and include the following:

- (1) A Dominion Bureau of Statistics 1961 Summary of Family Incomes Statistics covering Urban and Rural Non-Farm residents. This sum-

¹ It would be less in those provinces financing hospital services solely from general revenue and somewhat less on the average in those provinces financing by retail sales tax.

² Dominion Bureau of Statistics, *Urban Family Expenditure, 1959*, Ottawa: Queen's Printer, 1963, pp. 20 ff.

mary is based on the 1961 Census but, because it excludes farm population, covers only about 80 per cent of the total population.

- (2) A 1958 Farm Income and Expenditure Survey which, though outdated, does give us some indication of the proportion of farm population requiring subsidy.

In addition we have a Department of Labour survey of employers who in 1961 paid part or all of the medical insurance premiums of their employees. This survey indicates the number of employers who pay the medical insurance premiums in full, it does not indicate the amounts of premiums nor the proportions of the varying premiums paid by employers who pay less than the total premium. Finally we have an estimate of the number of families or persons receiving medical care through public assistance programmes.

The data relating to the *non-farm* population are presented in Table 18-5. With no subsidy of any kind, either in the form of employer payment of premiums or public assistance programmes, the number of individuals and heads of families requiring a subsidy of some kind in 1961 would range from 75 to 54 per cent depending on whether the maximum percentage of income allocated to health care is 5 or 7 per cent. These figures are substantial but it is necessary to adjust for the subsidies already provided in order to estimate the additional group requiring assistance.

First, it is necessary to eliminate recipients of public assistance, whom, we assume, will be means-tested and entitled to health services at public expense. We do not know the distribution of these as between urban and rural, and therefore have assumed that 90 per cent fall in the urban and rural non-farm category (as against 80 per cent of income earners). Eliminating these persons would reduce totals by 720,000. This total should be reduced further because only a proportion of the recipients of public assistance are heads of families or individuals. Since we do not have these data, in order to present a conservative estimate, we have reduced the total of 720,000 by only 20,000, leaving the total reduction from the urban and non-farm rural income earners of 700,000 recipients of public assistance.

Second, because we have no way of ascertaining either the income distribution of the 1,600,000 income earners who receive an employer contribution or the distribution of the amounts of the subsidies within each income group, we could take two extremes by assuming either that all 1,600,000 would receive from their employers, contributions high enough to make the government subsidy unnecessary, or alternatively, that despite an employer contribution all would require government subsidy. Since neither of these propositions is true, the actual number must lie somewhere in between, and we have assumed that a reasonable proportion would

be 50 per cent. We have calculated the totals requiring subsidy for each of the three categories (5, 6 and 7 per cent) on the assumption that one half of the 1,600,000 would still require governmental subsidy.

The results of these adjustments also are indicated in Table 18-5. If we assume that the maximum contribution for premium should be 5 per cent of income, the proportion of urban and rural non-farm individuals and family heads entitled to subsidy, and requiring some form of income assessment would be 64 per cent. If we assume that the maximum should be 6 per cent of income on a continuing basis, the total entitled to subsidy on the basis of an assessment of income would be 48 per cent on income earners. If the maximum is set at 7 per cent, the total entitled to subsidy would be 34 per cent.

With respect to farm families and individuals, it is evident from the data relating to this group presented in Chapter 4, that in 1957 Canadians living on farms were unlikely to have incomes on the average higher than Canadians living in cities. It is true that since 1957 there has been an improvement in average farm incomes but it is unlikely that they had risen so rapidly that by 1961 they had surpassed average urban incomes. We would assume then that in 1961 the percentage of farm income earners falling below the relevant "thresholds" or subsidy cut-off points was the same for farm families and individuals as it was for urban and rural non-farm families and individuals. In fact, it is likely that the proportion was higher. The result, however, is that, depending on the percentage rate (5, 6 or 7 per cent), in addition to those already income-tested for various welfare programmes, between 39 per cent and 66 per cent of income earners would have needed means-testing.

Applying the appropriate percentages to the total population (farm and non-farm) in 1961, as shown in Table 18-5, we find that somewhere between 3.4 million and 4.7 million families and unattached individuals, involving between 9.9 million and 14.1 million persons, would have had to be subsidized and means-tested in 1961. If we deduct those now being assisted and means-tested (including the "employer assisted" group) the corresponding numbers would have been in 1961 somewhere between 1.9 million and 3.2 million families and unattached individuals, involving between 5.5 million and 9.6 million persons. A comparable range for 1971 would be between 8.9 million and 14.9 million persons requiring means-testing. Whatever the exact number may be, it would be many millions. This would pose a formidable task in terms of organizing administrative machinery, extra costs which Canadians cannot afford, and a method of examining the individual which, in the opinion of many Canadians, is contrary to the dignity of man.

Although individual and family incomes are bound to rise in the future, increased expenditures for medical services are likely to rise at least as rapidly so that percentages may not change significantly.

TABLE 18-5 ESTIMATED NUMBER REQUIRING SUBSIDY, FARM AND NON-FARM AREA, CANADA, 1961 AND 1971

(in thousands)

Category	Total	Number Requiring Subsidy		
		Maximum of 5 Per Cent	Maximum of 6 Per Cent	Maximum of 7 Per Cent
Number of Unattached Individuals and Families				
Rural Non-Farm and Urban Area				
Unattached Individuals.....	1,407	923	827	756
Families (2 or more persons).....	3,657	2,861	2,385	1,966
Total: Families and Unattached Individuals..	5,064	3,784	3,212	2,722
Per Cent Requiring Subsidy.....	—	74.7	63.4	53.8
Farm Area*				
Unattached Individuals.....	763	500	449	410
Families (2 or more persons).....	490	383	319	264
Total: Families and Unattached Individuals..	1,253	883	768	674
Per Cent Requiring Subsidy.....	—	70.5	61.3	53.8
Total (Farm and Non-Farm)				
Unattached Individuals.....	2,170	1,424	1,276	1,166
Families (2 or more persons).....	4,147	3,244	2,704	2,230
Total: Families and Unattached Individuals..	6,317	4,668	3,980	3,396
Per Cent Requiring Subsidy.....	—	73.8	63.0	53.8
Less Persons Receiving Assistance (Farm and Non-Farm)				
Publicly Assisted.....	700	700	700	700
Employer Assisted.....	800	800	800	800
TOTAL.....	1,500	1,500	1,500	1,500
Net Unattached Individuals Requiring Subsidy.....	1,657	966	796	650
Net Families Requiring Subsidy.....	3,160	2,202	1,684	1,246
Net Families and Unattached Individuals Requiring Subsidy.....	4,817	3,168	2,480	1,896
Per Cent Requiring Subsidy**.....	—	65.8	51.5	39.4
Number of Persons*				
Gross Total Requiring Subsidy				
Unattached Individuals.....		1,424	1,276	1,166
Individuals in Families.....		12,652	10,546	8,697
TOTAL—1961.....		14,076	11,822	9,863
Net Total Requiring Subsidy				
Unattached Individuals.....		966	796	650
Individuals in Families.....		8,588	6,568	4,859
TOTAL—1961.....		9,554	7,364	5,509
Net Total Requiring Subsidy				
TOTAL***—1971.....		14,864	11,634	8,900

* We have assumed that income and family distribution for the non-farm population also applies to the farm population; that the family distribution is the same also for the assisted groups and that the family size for all groups shown is 3.9 as is the case for the population as a whole.

** The corresponding percentages for non-farm are as follows: 5 per cent—64 percent; 6 per cent—48 per cent; and 7 percent—34 percent.

*** The estimate for 1971 was obtained by applying the percentages indicated to the projected population of Canada, 22,589,500.

SOURCE: Estimates based on Dominion Bureau of Statistics, *Census of Canada, 1961*, Vol. 2, Part 1, and *Summary Family Income Statistics, 1961*, Ottawa: Queen's Printer, 1963.

ISSUE OF COMPULSION

This is an important issue, since it lies at the roots of our democratic system. The essential point to be made is that society, in its collective judgment, has found it necessary to use the force of law to achieve a number of socially desirable objectives: attendance at school, payment of taxes to support schools, licensing of physicians to prevent unqualified persons from practising, regulation of insurance companies, to mention only a few. There can be few who would oppose the element of compulsion present in any of these examples.

The most relevant example is, of course, compulsory education. But it should be noted that there is a great and fundamental difference between a government-sponsored health service and compulsory education. Compulsory education requires compulsory financing (through taxes) and compulsory attendance at school. In contrast, a health programme requires only payment of taxes; there is no compulsion on anyone to accept or obtain services. Moreover, as long as the providers of service remain as independent self-governing professional practitioners with whom the insuring agency, on which the professions are represented, makes a contract; they are not employees of the state. As a matter of fact, in a situation such as that obtaining in those provinces financing their hospital insurance programme from indirect revenues, it is almost impossible to discover any element of compulsion with the hospital services in any form whatever. In fact, the greatest result has been an extension of freedom—freer access to facilities, and freedom from fear of financial consequences.

SUMMARY AND CONCLUSIONS

We have examined the major points of view and the evidence relating to them. We can now summarize the conflicting points of view from which we can then proceed to present our conclusions.

First, those who believe governmental action either unnecessary or limited solely to subsidizing individuals to enable them to pay their premiums, base their case on the following grounds:

- (a) In our society (they say) government action should be considered as a last resort. Government's role should be:
 - (1) to meet the full needs of those who have no resources of their own (the recipients of public assistance) and,
 - (2) to meet the residual needs of those who can pay part of the cost of the premiums charged by commercial insurance and voluntary prepayment plans.

- (b) If government action is limited to assisting those in these two groups, the additional financial burden to be borne by governments will be substantially reduced.
- (c) The voluntary prepayment plans and commercial insurance companies have made rapid progress and, given time, will be able to meet the needs of the vast majority of Canadians.
- (d) In our democratic society compulsion should be avoided.

Those arguing in favour of a government-sponsored comprehensive health services approach do so on the following grounds:

- (a) There is a fundamental difference between a health service oriented to the prevention and treatment of illness and a voluntary or commercial insurance plan organized to meet sickness and accident costs. In its own interest, a society must strive for the greater objective.
- (b) All Canadians must have available to them an effective health service. The methods of financing must be such as to bring the direct costs within their capacity to pay.
- (c) The voluntary method has been effective primarily for organized groups, particularly for employees in stable employment and for whom the employer makes a substantial contribution toward the the premium, but which because of inherent limitation, does not meet the needs of a large proportion of the population that does not fall in these categories.
- (d) The number of persons covered by the prepayment plans and the insurance companies is still substantially below the total population while in many instances the benefits provided are inadequate. Moreover, the most difficult part of the task—the insuring of the aged, the chronically ill, the self-employed, the farmers, those in small establishments, and others not in employee groups—lies ahead.
- (e) The proposal that the government should only assist those who are ascertained by some form of means test to be in need of assistance to pay voluntary plan or commercial insurance premiums, does not realistically assess:
 - (1) the proportion of the population that would require such means-testing,
 - (2) the magnitude of the sums required for supplemental assistance,
 - (3) the difficulty of establishing equitable criteria for assessment of need,
 - (4) the fluctuation in incomes (for example, among seasonal workers) and the consequent continuing need for re-testing,

- (5) the high acquisition and administrative costs of voluntary insurance.
- (f) The National Hospital Insurance Programme has proved that a universal comprehensive programme is feasible, practicable, economical to administer and immediately effective for the total population.
- (g) The device of tax payments to achieve universal coverage is acceptable to a great majority of Canadians.

The Commission recognizes and has given careful thought to both the philosophical arguments and the practical consideration in the two positions. In endeavouring to sort through the many arguments pro and con, the Commission has been mindful that voluntary action *is* the main-spring of a democratic society, and that community action by the people through their government should be undertaken only when voluntary action leads to lesser objectives or fails to reach essential objectives for sufficient numbers.

The Commissioners were basically sympathetic to the views of those who believe full-scale government action to be unnecessary in the health services field. Like most Canadians, we suspect, we are opposed to change simply for the sake of change.

Accordingly, we examined hopefully the central feature in the Health Insurance Association and Canadian Medical Association proposals, that the great majority of Canadians could and would become insured through their own means and that the government would need to assist only a relatively small number. The Health Insurance Association, for example, states that the borderline for determining who will need subsidy should be drawn where the income tax legislation draws it now. That is, anyone now paying income tax is deemed able to pay his full premiums and only those who do not pay income tax fall in the "medically indigent" category and therefore require subsidy.¹

Unfortunately, the problem is not that simple. And the main reason is, as we have said, that the Canadian people are concerned not with paying for physicians' services alone but with meeting the costs of the full range of services necessary for comprehensive health care. That is, in ascertaining ability to pay without subsidy, we must consider not only the premium for medical and surgical care (as proposed in the two submissions mentioned above) but also for hospital care insurance already being paid (for example, \$78.00 per family per year in Ontario) and, as well, for dental care, drugs, optical services, and nursing. After more than 35 years of endeavour on the

¹ Canadian Health Insurance Association, *op. cit.*, p. 5.

part of the voluntary plans and commercial insurance companies, only slightly more than one-half the population of Canada has any degree of voluntary insurance protection and this for medical services alone. Of these, the coverage held by nearly 3 million is wholly inadequate. Over 7.5 million Canadians had no medical care insurance whatever.¹ Furthermore, a comprehensive health care programme involves more than the provision of health services. If these benefits are to be provided in an efficient manner they require systematic planning for the supply of a sufficient number of health personnel, the educational facilities required, and the effective organization of co-ordinated services.

Having decided that the best solution for Canada is the establishment of a comprehensive, universal Health Services Programme as outlined in the Charter, and having considered the three points at issue involved in determining the best method of implementing such a programme, we have concluded that Canada requires the establishment of health insurance funds, provincially administered, contributed to by the Federal Government from general revenue, and by provincial governments as they may determine, structured along lines similar to the Hospital Insurance Programme.

Our reasoning is as follows:

1. That the method of subsidy should be one that subsidizes the insurance fund rather than one that subsidizes individuals.
2. That reliance on the method of voluntary insurance would be unnecessarily slow and inevitably incomplete.
3. That the number of individuals who would require subsidy to meet total health services costs is so large that no government could impose the means test procedure on so many citizens or would be justified in establishing a system requiring so much unnecessary administration. The health services will make enough demand on our resources. We must not waste them.
4. That, so far as the issue of compulsion is concerned, we believe that as long as decisions of this kind are made by democratically elected legislatures, as long as they provide only basic essentials (for example, standard ward hospital care) and assure citizens free choice of physician and hospital and free choice of additional items against which they may insure through private arrangements, then we have confidence that our democratic ideals will not only be protected, but, in fact, more fully realized. It is of great significance for a democratic society such as ours that the Hospital Insurance and Diagnostic

¹ See page 727.

Services Act was passed by an unanimous vote of the House of Commons representing all political parties.¹

5. That the health insurance fund in each province should be administered by one agency in order to achieve full integration and effective planning of *all* health services, and thus to obtain the most efficient administration of all sectors of the proposed Health Services Programme. We have recommended that the existing hospital insurance programme be administered by the same agency in each province as administers all personal health services.² This necessarily means rejection of any proposal that one phase of health services, namely payment of physicians' services, be administered by a separate agency.

To return, in conclusion, to the claim made by the health insurance industry that given time the great majority of Canadians would become insured through their own means, we feel that this is not a realistic proposal.

In this respect we can learn a lesson from our sister Dominion, Australia. After 11 years of operation in Australia, a voluntary programme of physicians' services with government subsidies, it has been possible to cover only about 80 per cent of the population and this includes public welfare recipients. Australia, while choosing to build its medical benefits scheme on a voluntary basis with government subsidies, rejected the use of commercial insurance carriers. Sir Earle Page, a former Prime Minister of Australia and the architect of the Australian Medical Benefits Programme, was firm in his conviction that only voluntary non-profit organizations should be used. These bodies have operated on an administrative ratio of 13 per cent including a 5 per cent commission paid to vendors of contribution stamps, which is the method by which the self-employed and those not subject to payroll deductions contribute to their chosen carriers. Begun in 1953, this voluntary system in Australia has provided coverage on a reimbursement basis of up to 90 per cent of medical bills to approximately 80 per cent of the population. It appears very difficult to cover the remaining 20 per cent; the 80 per cent includes the pensioners and those on public assistance programmes.³

Now, if we accept the premise that the health insurance industry in Canada could achieve universal coverage of medical services—and this is in our opinion an heroic assumption—such a programme would cost, according

¹ Canada, House of Commons, *Debates* 1957 Session, Vol. III, Ottawa: Queen's Printer, 1957, p. 3393-94.

² See Chapter 2, Recommendation 1, (7).

³ *The Australian National Health Service*, a descriptive document prepared for the Advisory Planning Committee on Medical Care to the Government of Saskatchewan, The Secretariat, Regina, 1961, pp. 4 and 8. "Report on Medical Services Insurance in Australia", Association Notes, *The Canadian Medical Association Journal*, 84: 965-971, April 29, 1961.

to our estimates,¹ \$797 million in 1971 (in current dollar terms). To this must be added the cost of administering such a programme by government agencies, estimated on the basis of the hospital insurance experience at 5 per cent,² equivalent to \$40 million for a total of \$837 million. If the 28 per cent retention ratio³ were to apply in 1971 as it did in 1961,⁴ the total cost of the medical services would amount to \$1,020 million in 1971.

Hence, the decision which Canadians have to make, assuming that they accept the claim of the health insurance industry that it can provide universal coverage, is whether they wish to pay \$1,020 million for physicians' services in 1971 for a programme administered by the insurance industry, or \$837 million for a programme administered by government agencies.⁵

In our opinion it would be an uneconomic use of Canada's limited resources to spend an extra \$183 million, or a substantial part of this sum, just to have physicians' services alone administered by the health insurance industry. Physicians' services, as we have emphasized, are but one phase of a comprehensive programme. Canada faces substantial demands for funds for the expanding Health Services Programme, as we elaborate in Chapter 20. Hence, we must choose the most frugal method to achieve our objectives—one which we know from our hospital insurance experience is equally efficient.

Accordingly we have been impelled to conclude that government action is imperative and that we should move immediately to mobilize the nation's resources to establish efficient, universal, comprehensive health services programmes in all ten provinces and the territories.

¹ See Chapter 20.

² See Chapter 20. The ratio was 5.7 per cent in Saskatchewan on the basis of the first year's experience in operating its medical services programme provided by data (Saskatchewan Medical Care Commission).

³ This ratio covers acquisition costs, taxes, administration, reserves and profits. (See Berry, C. H., *op. cit.*, Chapter 4, and Table 18-3.)

⁴ We have used the 28 per cent ratio which is the retention ratio applicable to all carriers including stock companies, mutual companies, co-operatives and fraternal societies, and prepayment plans. The ratio would have been higher if we had used the proportion applicable to commercial insurance carriers only (see Table 18-3).

⁵ These figures are in constant (1957) dollars. The amounts would be higher in current dollar terms.