MEDICAL SERVICES IN NEW ZEALAND

HUGH MACLEAN,[1] M.D., F.A.C.S., and DEAN E. MCHENRY,[2] PH.D.

AMONG the free nations of the world, New Zealand has done the most "advanced" experimenting with state intervention to furnish medical services for all of the people. It is now ten years since provision for health benefits was written into the Social Security Act of 1938. The New Zealand plan for bringing medical care to all has been roundly condemned by the organized profession, both in the Dominion and overseas, and has been admired rather overcredulously by reformers at home and abroad. Actually, however, no comprehensive study of the scheme has heretofore been published in North America.

The essential feature of the New Zealand system of medical services is that the state pays for basic medical, pharmaceutical, hospital, and some other services. These benefits are universally available to the whole population without means test of any kind. Funds are raised through taxation. In compensating general practitioners, both capitation and fee-for-service methods are used, but the overwhelming majority uses the latter. Pressure from the profession has led to three major concessions: the fee-for-service plan, the right of the doctor to charge the patient more than the fixed fee, and state refund to the patients rather than direct collection by the doctor from the state fund. With these modifications, nearly all physicians in the country are practicing under the act, although the organized profession and the Government have not been cooperating to the extent necessary for a proper functioning of the scheme.

GENESIS OF THE NEW ZEALAND SYSTEM

Medical services in New Zealand, before the advent of the Labor Government in 1935, bore general similarity to those of

[1] Physician and Surgeon formerly of Regina, Saskatchewan, Canada; now of Los Angeles, California.

[2] Associate Professor of Political Science and Dean of Social Sciences, University of California, Los Angeles.

other English-speaking countries. Most practitioners engaged in individual practice, and their compensation came mainly from fees for professional services collected by them from their patients. Except for the friendly societies and fraternal orders, there was little pre-paid medical care. In New Zealand, as in other countries, doctors accepted payments for workmen's compensation cases from insurance funds.

While the major features of medical practice were similar to those in the United States, Great Britain, and the other Dominions, a number of developments in auxiliary health services were rather unique. First, extensive public hospital facilities had been provided. These are managed by local elective hospital boards, each of which has jurisdiction over one of the forty-two districts into which the country is divided. Prior to the Social Security Act, local hospital boards relied for their finances mainly on fees from patients who could afford to pay, and from rates (land taxes). Counting all hospital beds, public and private, in 1945 there were about ten beds per 1,000 population.

Second, free dental services in the schools were well established. A fairly complete state dental service was gradually made available to primary pupils, beginning with the younger children in 1919. Third, great progress had been made in infant care through the "Plunket movement" founded by Dr. Sir Truby King in 1907 (1). The infant mortality rate of the Dominion consistently is one of the world's lowest, and credit is generally given for this achievement to the Plunket system of infant feeding, and training of mothers, hospitals, and nurses. Although state subsidies are now received, the movement was started with private subscriptions and still relies heavily upon them.

In addition, two other factors that affect health services should be borne in mind. Most New Zealand medical practitioners were trained in the Medical School of the University of Otago, in Dunedin. The standards of the medical school are high, and its graduates have made remarkable records in post-

graduate work in England and Scotland, and occasionally in North America. Finally, the geographic features of New Zealand affect the health of the people. Its remote situation and "mild but raw" climate serve to keep down some of the communicable diseases. Its sparse population (totalling only 1,750,000) and rugged terrain left many rural areas without adequate medical care or access to hospitals.

Health Policy of the Labor Party. The New Zealand Labor Party won a decisive victory in the general election of November, 1935, and has governed the country continuously since that time. Like the Labor Party in the United Kingdom, it is a non-doctrinaire and mild socialist party, more inclined to extend social security than to transform society. Its health program was only one unit among a number of new and expanded social services.

Early Labor programs and platforms contained little on the subject of medical care. Following the ordeals imposed upon the party during World War I, annual conferences began to adopt in piecemeal fashion various policies that eventually were codified and called a platform. The earliest mention of medical services appears to be that contained in a statement of educational policy adopted by the 1921 conference (2). There, and in the formal platform issued the following year, the party listed "free medical attention" among educational services. (3) Presumably this was intended for school children only. In the last compilation of platform appearing before the 1935 election, a similar item is included under "Education," reading: "Free medical attention to be available to all pupils attending schools." (4) "Health" is a separate heading just before "Education," and contains three clauses:

> 1. Nationalisation of the medical service, with free medical, dental and maternity attention.
>
> 2. The establishment of a State Housing Department for the purpose of providing better homes for the people, and at less cost by the elimination of private profit.

3. The establishment of baby clinics, at which the best medical skill and attention shall be available free of cost.

In Labor's election manifesto of 1935, a "National Health Service" is promised, that would:

(a). Give every citizen the right during ill-health to call in his own medical practitioner, to consult and receive the services of specialists where required, and by the reorganization of our Hospital System, to make available all other services that are necessary for the restoration and maintenance of health.

(b). Extend the Home Nursing Service so as to provide all the attention necessary for mothers and other members of families when it is not convenient for them to leave their own homes. The Labor Government will provide the necessary laboratory facilities to maintain the efficiency of the services, together with adequate payment to practitioners and others who carry out the work. The service will be available for every family. (5)

Another section of the manifesto contained the declaration: "Health services should be made as freely available as educational services."

In view of its platform and manifesto declarations, the Labor Government that took office late in 1935 considered it had a mandate to establish a health scheme with a broad variety of benefits, universal in application and free of payment for specific services by the patient.

Shortly after the new Government took office, it was announced that the Minister of Health, Mr. Peter Fraser, was considering a national health scheme, and that Dr. D. G. McMillan, a Labor member of the House of Representatives (M.P.), was helping to formulate it. In 1934, at the age of thirty, Dr. McMillan made a deep impression upon delegates to the annual party conference by what Mr. Fraser called " . . . an eloquent and deeply sincere speech on the subject of a National Health Programme for Labor." (6) He had written the only Labor pamphlet on the subject of health services, was the only physician among Labor M.P.'s elected in 1935, and

therefore occupied a very strategic position in organizing the health plan.

McMillan's views are expressed in A NATIONAL HEALTH SERVICE. His main criticisms of the British health insurance scheme were the limited services provided and the lack of universal coverage. The principles he laid down for a service in New Zealand were stated in the following terms:

> Our New Zealand National Health Service must be 'free.' It must be complete; it must meet all the needs of all the people, and it must be characterized by six main essentials:
>
> 1. It must aim at the prevention of disease.
> 2. It must make provision for income . . . (lost through illness).
> 3. It must provide all the facilities for the diagnosis and treatment of disease.
> 4. It must be based upon the provision of a family doctor for every person.
> 5. The service must be founded upon the principle of the patient's free choice of doctor.
> 6. It must include adequate provision for research in all matters relating to health. (7)

The service could be financed, he said, either by special levies based on ability to pay, or out of the Consolidated Fund, but he commented that ". . . non-contributory insurance has the advantage of administrative simplicity and cheapness." (8) Dr. McMillan anticipated a wide range of services—general practitioner, specialist, nursing, hospital, pharmaceutical, and other—all free. There is abundant evidence that Dr. McMillan's views had much to do with the form and contents of the health sections of the Social Security Act. The aspect in which his outlook was most decisive appears to have been in the stress placed on the key role of the general practitioner, the family doctor who has a "thorough knowledge of the patient" and "long and personal contact."

Attitudes of the Medical Profession. The medical profession

of New Zealand was ill prepared to deal with popular and political demands for a national health scheme. A thoughtful warning had been given in early 1935 by Dean C. E. (now Sir Charles) Hercus of the Medical School, University of Otago. He told of the sorry plight of the British medical profession at the time Lloyd George brought into Parliament health insurance legislation. In country after country the profession failed to provide effective leadership in the formulation of health plans. Dean Hercus concluded:

> No lesson stands out more clearly than that the profession should keep in the closest touch with those engaged in drawing up even tentative schemes and should be prepared to advise and direct development along the lines which are essential to the sound practice of medicine. (9)

Although the British Medical Association, New Zealand Branch, (hereafter BMA) did establish a "national health insurance committee," brought Sir Henry Brackenbury out from England to consult, and carried on a lively discussion of issues in its *Medical Journal*, the profession neither proposed a realistic, comprehensive scheme itself nor did it manage to maintain close contact with the Government while the provisions of the Social Security Act were being formulated.

The BMA position was defined in some detail in a letter dated July 6, 1937, and addressed to the secretary of the committee of Labor M.P.s appointed to advice the Government on health insurance. (10) The population would be divided into four groups, and health services provided on the basis of their capacity to pay for themselves. First, pensioners, unemployed, and others with comparably low incomes should receive a complete health service wholly at the expense of the state. Second, wage and salary earners with modest incomes would receive full services and would pay for the larger part of them. Third, persons not covered in the first two catgories and below £500 per year income would receive hospital and specialist services, for which they should contribute to an insurance fund.

Fourth, all with incomes of £500 and over should make their own arrangements for health services, with the option of coming under the third plan if they chose.

In discussing administration of the proposed scheme, the BMA stressed, quite properly, that the medical profession should play a major part in managing health insurance. The plan outlined by the BMA in 1937 bore a general similarity to the health insurance scheme then in force in the United Kingdom. The British plan involved only two categories of the population, those covered and those exempt. Coverage included all manual workers and non-manual workers making £250 or less per year. The British plan did not include the families of employed persons.

Formulation of the Government's Bill. Both the Government and the BMA must bear some responsibility for the lack of consultation and compromise over the medical benefits of the Social Security Act. A committee of Labor M.P.s was appointed to advise the Government. Under the chairmanship of Dr. McMillan, it held hearings around the country. BMA leaders testified before the committee, although they did entertain doubts about its composition and personnel:

> It did contain as chairman a member of the medical profession whose highest qualification for the position was a political one, a man who already had strong preconceived ideas on the subject, based on no personal knowledge of medical practice except his own relatively limited experience in this country. (11)

The McMillan Committee began its investigation by preparing and sending a questionnaire to ten groups that would be most affected by the proposed health legislation: physicians, hospitals, friendly societies, chemists, dentists, masseurs, nurses, opticians, ambulance societies, and life insurance offices. The questions concerned coverage, finance, benefits, and other matters. The report does not give a clear statement of the replies received, rather the committee mixed its own views with those of the respondents and presented rebuttals to the replies with

which it disagreed. Recommendations of the committee then followed. A *universal* national health service ought to be introduced. Medical benefits should begin with general practitioner, maternity, and auxiliary services, and later be expanded to specialist, nursing, and other fields. Pharmaceutical and hospital benefits would be instituted at once. Dental service, limited initially to extractions and provision of dentures, and expansion of the school dental service, was recommended. Aid to medical research and added support for health education were endorsed by the committee.

The committee argued in strongest terms for the universal principle, and attacked with vigor the BMA position of classifying people into income classes. "Unlike overseas people," the committee declared, "self respecting freedom loving New Zealanders will never respect or tolerate a service which gives one type of service to the poor and another type to the well-to-do. Any scheme which savours of a poor-man service, of charity, which divides the people into two groups, those able to pay private fees and those unable to do so; which differentiates in the mind of the doctor, either consciously or unconsciously, between patients would be foreign to the ideals and aspirations of the Government in particular and the people of New Zealand in general." (12)

Apparently the McMillan Committee considered only capitation as a means of remunerating doctors for general practitioners' services. Fee-for-service was not mentioned in the report. The committee did propose, however, that the maximum number of patients permitted on any practitioner's list should be 3,000. BMA representatives claim they did not see the report Dr. McMillan's committee made to the Government, nor was it published in a public document even after the Social Security Act was on the statute books. The Government and the BMA were increasingly suspicious of one another.

The next phase was dominated by the select committee of the House of Representatives known as the National Health and Superannuation Committee. It was established on motion of

the Prime Minister, Mr. Savage, and included in its membership of eleven were Messrs. Savage, Nash, and Nordmeyer, who was elected chairman, and S. G. Holland, who subsequently became Leader of the Opposition. In April, 1938, the Prime Minister submitted to the committee a memorandum containing the Government's social security proposals. Concerning health services, the "white paper" read as follows:

1. The Government proposes to provide:
   (a). A universal general practitioner service free to all members of the community requiring medical attention.
   (b). Free hospital or sanitorium treatment for all.
   (c). Free mental hospital care and treatment for the mentally afflicted.
   (d). Free medicines.
   (e). Free maternity treatment including the cost of maintenance in a maternity home.
2. The Government further proposes that these services should be supplemented, when organization and finances are available, by the following additional services:
   (a). Anaesthetic.
   (b). Laboratory and radiology.
   (c). Specialist and consultant.
   (d). Massage and physio-therapy.
   (e). Transport service to and from hospital.
   (f). Dental benefit.
   (g). Optical benefit.
3. It is also proposed to institute a free home nursing and domestic help service when the necessary staff has been trained to make such a proposal practicable.
4. Complementary to the foregoing proposals, the Government contemplates an extended educational campaign for the promotion of health and the prevention of disease. (13)

Judging from the report filed by the committee, the majority was able to reach a verdict in favor of the Government's proposals promptly. Half of the ten page report is taken up with a rebuttal of BMA arguments and with counter-proposals. The committee report lists five main points made by the BMA:

i. There is no need for a universal service while many people are able to pay for their own doctor and will prefer to do so.

ii. That the development of friendly societies and the growth of our public hospital system renders unneessary a scheme of the extent proposed.

iii. That the proposal will lead to a deterioriation of the standard of medical service.

iv. That the adoption of the universal scheme will lead to those very distinctions which it is the object of the Government to avoid.

v. That it may involve embarassment to the commitments of medical men. (14) (through reduced earnings.)

Having disposed of the BMA's arguments, the committee proceeded to recommend to the Government and the House favorable consideration of the proposed legislation.

The BMA officials claim that they were assured that opportunity would be afforded them to examine the proposed bill before it went before Cabinet and House, but the bill was sent through without being submitted to them. (15) Dr. Douglas Robb, outstanding Auckland surgeon, declares:

> Indeed, only after the Social Security Bill was introduced into the House were its contents made known to the B.M.A. There is no doubt that the Bill was political in its conception, and that technical and professional considerations were almost entirely ignored. (16)

HEALTH BENEFITS UNDER THE SOCIAL SECURITY ACT

Health benefits were provided for under Part III of the Social Security Act, 1938. (17) Five classes of health benefits are defined in the act: (1) medical, (2) pharmaceutical, (3) hospital, (4) maternity, (5) supplementary. The inaugural date for any benefit was to be fixed by the Minister of Health. All persons ordinarily resident in New Zealand are eligible for health benefits. Funds to finance the whole Social Security scheme are raised by a flat tax on all income (originally 5 per cent now 7½ per cent) and an annual levy on all adults (£1

for men and 5s. for women), which has since been repealed. Additional moneys needed to finance the whole social security program, monetary as well as health benefits, are secured by transfer from the Consolidated Fund of the state.

A mere summary of the act gives insufficient emphasis on its principles and characteristics. The law anticipated a *universal coverage* of the total resident population, regardless of economic status. In this respect it pioneered, for British and other health insurance schemes, up to that time, provided for limited coverage only, usually employed workers receiving less than a stated yearly wage. The original British health insurance left out not only families, but also omitted the unemployed and the employed who made more than the stated wage. The New Zealand act was also unusual in that it was *non-contributory,* benefits being made available to all as a matter of right, regardless of whether or not taxes were paid for the purpose. New ground was broken, also, in the *comprehensiveness* of the benefits provided for. Nearly every conceivable contingency was anticipated and an appropriate benefit defined. No country, with the possible exception of Russia, had ever afforded its people more complete cradle-to-grave protection.

The election of 1938 followed shortly after the passage of the Social Security Act. No issue held greater interest for the voters than that of social security, and the Labor Party made the most of its popularity. Party literature called the 1938 act ". . . the greatest piece of humanitarian legislation ever passed by any Government in the history of the civilised world." (18) The Labor election manifesto declared:

> The Social Security legislation now on the Statute Book will ensure to every member of the community, full and adequate hospital, sanitoria, medical, pharmaceutical, maternity and other health services. Provision has been made for vigorous measures aimed at the prevention of disease. (19)

Even during the campaign it was clear that the organized medical profession would not cooperate in the inauguration of

the scheme. The BMA denounced the medical benefits section of the Social Security Act in the strongest terms:

> The Act determines the complete socialisation of the profession and institutes a system of medical service which has been aptly described as "demoralising to those that give it and destructive to those who receive it," a service providing the poorest type of treatment known to the Medical Profession. For the benefit of the health of the people of New Zealand in the future and for the preservation of all that is best for the profession of medicine, it is our duty to oppose to the uttermost this ill-conceived measure so strongly tainted by party politics. (20)

The Auckland president of the BMA was reported as declaring: "New Zealand doctors throughout the length and breadth of our country will not work the scheme."

An equally belligerent mood was in evidence among Labor leaders. Questioned regarding the BMA attitude of non-co-operation, Mr. Savage stated: "The Government will see that the law as passed Parliament is carried out." (21) Mr. Fraser, the Minister of Health, warned that if the profession continued its opposition, the Government "reluctantly" would be compelled to reconsider and introduce a "State medical service." (22) The *Standard*, weekly paper of the Labour Movement, headed an editorial on the subject: "Who Shall Govern?"

In January, 1939, the Minister discussed with BMA representatives the possibility of providing medical benefits on the basis of fee-for-service, but the profession was unwilling to make suggestions or proposals. (23) Beset with administrative problems connected with launching this huge program, the Department of Health moved slowly. The first benefit, free treatment in state mental hospitals, was put into force April 1, 1939, without opposition.

Maternity Benefits. The second class of benefits, maternity, was made available May 15, 1939. The services of hospitals, nurses, and physicians were involved under maternity benefits, and the first battle between Government and BMA was fought

over the terms of the contract between the Department and the medical practitioner. The success of the BMA in persuading doctors to withhold their services until more satisfactory terms were offered, encouraged elements in the profession favoring obstruction in the general practitioner field.

Contracts for maternity services were offered in April. Robb states that only two doctors accepted the contract. Further negotiations with the BMA led to revisions contained in the Social Security Amendment Act, 1939. The main provisions for maternity medical services, as revised, are as follows: (1) a scale of fees is fixed by agreement between the Minister and the BMA; (2) "every doctor affording services covered by the scale of fees must accept the fees from the Fund in full satisfaction of the claim for the services" with two exceptions (a) doctors who notify the Minister they will not provide services under the act, and (b) obstetric specialists who are permitted to charge the patient over and above the basic fee. (24)

The basic medical fee for maternity cases was set at £5 5s, (25) and was raised to £6 6s in 1946, and appears to be considered reasonable by the medical profession. In 1940, the Department reported that six practitioners declined to work under the act; in 1943 the number had declined to five. In order to collect the full maternity fee, the doctor must report five ante-natal and one post-natal attendances, and must have been present at delivery. Obstetrical specialists are those so recognized by the Minister. Application for such status is made by a practitioner; a recommendation is made by the BMA, and the Minister makes the final decision. Among the criteria used are proportion of practice devoted to obstetrics and membership in the Royal College of Obstetrics and Gynecology. In 1940, twenty-two were recognized as obstetric specialists. Only specialists and non-cooperating doctors may charge a patient more than the basic fee of £6 6s.

Hospital services for maternity cases are free or partially free, depending on the ownership of the hospital and the terms of the contract between the Department and the particular institu-

tion. Hospitals operated by public Hospital Boards and the state-owned St. Helens Hospitals (located in the four main cities) accept the social security payment as payment in full. Private maternity hospitals, almost without exception, have entered into contracts with the Department. Of the 201 under contract in 1943, only thirty-one accepted the allowance from the fund as full payment, and all others made additional charges to the patient. (26) The basic charges that may be claimed from the fund are £2 5s. for the day of delivery and 12s. 6d. per day for up to fourteen days of hospitalization.

The third type of maternity benefit, obstetric nursing in the patient's home, makes possible proper attendance in cases where a hospital is not used. Nearly 300 nurses have contracted to render such services, but the number of claims is only a small fraction of those made for hospital services. For full-time domiciliary services, nurses are paid 13s. per day up to fourteen days; for part-time visiting services, 5s. per day for the same time limit. Provision is also made for delivery by mid-wives.

For an annual cost to the state of between £500,000 and £600,000, or around 6s. per capita, New Zealand has removed most of the financial burden of childbirth from the family and placed it upon the community. In so doing, it has made medical care available in maternity cases, regardless of the ability of parents to pay. The scheme has not yet operated long enough to assess the social consequences of maternity benefits. The most crucial questions in this field appear to be: (1) Can New Zealand's infant mortality rate, already one of the lowest in the world, be reduced still further? and (2) Will the maternity benefits increase the birth rate and the size of the families? The impact of the war has made statistics of the era 1940–1947 period difficult to evaluate. The introduction, in 1946, of universal family allowances, without means test, may make differential diagnosis difficult in the future.

Maternity benefits have been the most satisfactory of the main classes of health benefits under the Social Security Act. They are comparatively easy to administer and difficult to

abuse. An absolute check over practitioner, patient, and hospital exists in the form of birth records. Perhaps greatest public support would be given to this aspect of health benefits, thanks in part to the great educational work done by Dr. Sir Truby King, and the monuments of his endeavor—the Plunket movement and the Karitane nurses.

Hospital Benefits. Hospital benefits, for other than maternity cases, became effective for in-patient treatment on July 1, 1939. In practice this means that hospitalization is free in public hospitals run by Hospital Boards and in semi-public hospitals like the Karitane Baby Hospitals. Private hospitals may collect from the fund the 9s. per day per patient allowed to Board hospitals, and from the patient whatever extra charge is approved by the Minister. The amount allowed varied with the accommodations provided, *e.g.* private room, two-bed, or four-bed rooms.

Out-patient treatment by Board hospitals was included in hospital benefits beginning March 1, 1947. The fund simply subsidizes the Hospital Board operating an outpatient service with a grant covering 60 per cent of costs of that service.

Charges on the social security fund for hospital services are larger than for any other class of health benefit. The total yearly cost to the fund has been over £2,000,000 since 1943–1944. To arrive at the total bill for hospital services, paid for from public funds, one must add to the above sum another £1,000,000 which Hospital Boards receive from local levies on the unimproved value of land. Other smaller sums must be included to cover the cost of mental, convalescent and other hospitals maintained by the state out of general funds.

What has the hospital benefit done to the hospitals? For one thing, it has been a factor in filling them to capacity and has necessitated their extension. Far from relieving Hospital Boards of financial burdens, it has added greatly to their responsibilities and their costs. This arises from the fact that 9s. per day does not pay the full cost of keeping a patient in a hospital, and the extra amount must be raised by the land tax. The

charge is sometimes made that the availability of hospital benefits has caused a large number of chronic and minor cases to fill hospital beds, leaving a minimum of space available for cases in great need of hospitalization.

The medical profession, as represented by the BMA, has become concerned over the fate of the private hospital, lest the doctor in private practice lose his "workshop" and the trend toward state salaried service be accentuated. It is rather paradoxical that the two methods proposed for strengthening the private hospitals involve state action: (1) increasing Government subsidies, and (2) securing higher fees through an order of the stabilization authorities. (27)

Medical Benefits. The Government delayed until 1941 opening up the Pandora's box of general medical benefits. It was in this field that the BMA had uttered its most shrill challenge, and in this field the medical profession enjoyed, through the solidarity of its organization, a virtual monopoly over the manpower necessary to operate any such scheme. Here, indeed, was the battle that would decide the course of the war between the Government and the BMA. On the Government side, there was a reassignment of responsibilities; Peter Fraser had become the Prime Minister on Mr. Savage's death; after a brief transitional arrangement the portfolio of Health was turned over to A. H. Nordmeyer.

A. Capitation Plan. The first big jump was made on March 1, 1941, when medical benefits under the capitation scheme were made available. People were entitled to choose medical practitioners and to enter into agreements with them for general medical services, excluding maternity and specialist services. The fund would compensate cooperating doctors at the rate of 15s. per year for each man, woman, and child on the practitioner's list, or panel. The doctor is also entitled to receive a mileage allowance for each patient residing from three to twenty miles away. The procedure is similar to that under the British health insurance scheme. The patient had free choice of doctor and

the doctor could accept or reject patients. No limit was placed on the number of patients a doctor could have under the capitation plan.

The BMA had been girding its loins for such an announcement for a long time. In 1938 it had inaugurated a fund to assist practitioners who might otherwise be forced to accept service under the act. The BMA advocated non-cooperation and was gratified that only a small number of practitioners signed up under the capitation plan. (28)

Capitation is still in operation, but its use has declined fairly steadily. Charges on the fund for capitation services were £55,612 in 1943–44, £42,400 in 1944–45, and £38,084 in 1945–46. (29) In some sparsely settled areas, capitation appears to have worked well. Some practitioners in urban areas took to the plan, and found large monetary rewards were possible through it. The Health Department, in noting the reduction in use of the capitation plan, commented in 1945:

> This was to be expected, as the capitation scheme has certain disadvantages to both doctor and patient when working side by side with a fee-for-service system. The capitation system, however, is sound in principle, and it has yet to be proved that it is not the most satisfactory form of medical insurance practice. (30)

When the BMA conducted a plebiscite of its membership in 1945, only fourteen doctors reported conducting practice under the capitation plan, but thirty-five said they preferred the capitation system over other plans. After Mr. Nordmeyer explained to the 1942 annual conference of the Labor Party that the fee-for-service system was "only a stop-gap," the conference reindorsed the capitation system. (32) Despite the determination of the Labor people to the contrary, it appears that the BMA will determine, by negative action if not by positive, the remuneration scheme to be used.

It is doubtful if the majority in the medical profession will ever be reconciled to the capitation system, so long as the coverage is universal and service is free. New Zealand doctors de-

veloped a prejudice against capitation as it operated under British health insurance, partly because of the low remuneration offered. In the report of the BMA Medical Planning Committee, further consideration of the capitation system is conditioned upon: "A definition of the content of general practitioner service would have to be made, a schedule of duties drawn up, and all beyond that should be left open to charge of fees, subject to the refund principle." (33) Much of the BMA attack upon capitation as introduced in 1941 centered around the argument that it would make difficult the reentry into practice of medical men then in the armed forces.

The BMA freely conceded the advantages of the capitation plan from the Government's point of view. The costs of operation could be computed with considerable exactitude. Administration is rather simple. The BMA contended, however, that an unfair burden of risk was placed upon the practitioner, who must provide medical services for a set amount per year regardless of the amount of illness encountered.

B. *Fee-for-Service System.* Soon after the capitation plan was inaugurated, it became obvious that the medical profession would not cooperate under that system to an extent sufficient to get medical care to all of the people. The Government then began to consider seriously the instituting of a fee-for-service plan. Its initial proposal was for a fee of 5s. per attendance in the doctor's surgery and 6s. 6d. in the patient's home. There was an outcry in the profession. Eventually the Government compromised on two points. The scale of fees was raised to 7s. 6d. for an ordinary weekday consultation, in either office or home, and to 12s. 6d. for a night or Sunday call. The right to charge over the fixed amount was also granted. At the time the labor caucus and Cabinet yielded on the latter point, those who were negotiating with the BMA for the Government were under the impression that some 90 per cent of the doctors would accept the set fees as full payment. The fee-for-service system was put into effect on November 1, 1941.

The BMA then adopted the stand that the profession should carry on as usual, and continue to charge normal fees. Professional services would be rendered and the patient billed for the customary amount. A common fee for an ordinary daytime consultation is 10s. 6d. (half a guinea). The patient pays, receives a receipt, submits the receipt and proper form, and gets back from the fund the 7s. 6d. allowed. This is called the "refund plan." The Government prefers to have the doctor claim payment direct from the fund, and accept the reimbursement allowed as full payment for his service; this is the "direct claim" method of remuneration. A third variation has arisen in practice: the doctor claims direct from the fund, but also requires the patient to pay him an additional amount; this is known as the "token" system.

1. *The Refund Plan.* Refund, the method of remuneration favored officially by the BMA, involves the payment of the doctor's fee in full by the patient, who may then recover the set amount allowed from the social security fund. The only variation from the traditional practice in this scheme is the requirement that the practitioner provide a receipt for the patient. Except insofar as patients consult their physicians more freely since they know a part of the fee is refundable, the normal pattern of practice is not interfered with. A committee of the BMA summarized the advantages of this system as follows:

> This method causes the least interference with normal conduct of practice. The relationship of doctor and patient is not intruded upon by any interested third party. The doctor can give his patient the attention and service he requires, and graduate his charges thereto. The patient retains some responsibility for his own treatment, which is not a negligible matter, while obtaining return for his taxation without temptation to overdo it. (34)

It also is argued that the receipts issued constitute a full record of a doctor's earnings for tax purposes. Neither patient nor doctor, the BMA claims, is likely to abuse social security funds under the refund plan. In its referendum of 1945, the BMA re-

ceived replies from 368 general practitioners, of whom 221 practiced under the refund system, but only 172 indicated their preference for refund over other systems. (35)

The Department of Health has found the refund system difficult and very expensive to administer. Around 30 per cent of the refund forms are incorrectly filled out by patients, necessitating further correspondence and delay before payment can be made.

2. *The Direct Claim Plan.* Direct claim, generally called fee-for-service in medical circles, means that the doctor provides services for the patient and submits the appropriate form, signed by the patient, to the Department of Health in order to receive remuneration from the fund. He accepts such compensation as payment in full, and receives nothing from the patient directly. The Government favors this plan, for it greatly simplifies the administrative procedure and is less costly. The forms submitted by the doctors, with few exceptions are correctly filled out. Only a relatively small number of payments is required to satisfy all direct claims made by doctors, whereas the refund system involves millions of payments to patients per year.

The BMA argues that patients may call upon a physician for service unnecessarily if that service is entirely free, and that some doctors will make an excessive number of calls in order to collect the additional fees. The danger of the patient overdemanding services certainly exists in both capitation and fee-for-service schemes. It is difficult to see how a conscientious doctor would overvisit under any system. Basically the profession opposes the direct claim plan because it interferes with the traditional method by which the doctor collects his fee for services rendered.

In the BMA referendum, 110 of the 368 general practitioners reported they were operating under the fee-for-service (direct claim) system, and 135 stated that they preferred that system. (36)

3. *The Token System.* Out of the fee-for-service plan, with its provision for remuneration either by refund or direct claim,

emerged a third variation which combines features of both. The doctor makes a direct claim for the statutory fee and also receives an additional payment from the patient. The profession has given this mixed method of remuneration the name of "token." A common example of token is for the doctor to charge 3s. above and beyond the amount he will collect directly from the fund.

From the beginning the BMA branded the token plan as undignified, despicable, and possibly illegal. The BMA medical planning committee declared: "It is the equivalent of asking for a tip." (37) An opinion that the token method was illegal was obtained from counsel for the BMA, (38) but Department of Health officials found nothing illegal about it. BMA spokesmen also condemned the token plan because it allegedly permits dishonesty and tax evasion. Certainly refund provides tax authorities with receipts that can be checked against income tax returns, but the token plan offers no more temptation to evasion than the pre-Social Security methods of collecting in full from the patient.

From the Department point of view, token is preferable to refund, largely because direct claims from doctors are easier to pay and cheaper to administer than refund applications. The patient has every reason to favor token over refund, because he is relieved of the necessity of filling out forms and going to the Post Office to cash his warrants. The doctor is protected against excessive calls by the patient through the same deterrent that operates under refund, namely the collection of a non-refundable amount beyond the statutory fee.

At the time of the BMA referendum of 1945, the token system had been so thoroughly denounced by the medical planning committee as illegal that it is not surprising that few doctors were willing to declare they practiced under it. Only eighteen of the 368 general practitioners answering stated they conducted their practice under token, and the same number declared they preferred it. (39) Letters from practitioners to the editor of the *New Zealand Medical Journal* denied the stigma of illegal-

ity and claimed the referendum question on token was prejudiced by "false information." (40) After an exhaustive discussion and many votes, the council of the BMA decided in 1946 to empower the executive to negotiate with the Government on the token system. (41) Department records do not show what proportion of practitioners uses token, for all direct claims from doctors are grouped together. By 1946, however, around one-half of all moneys paid from the fund under medical benefits was paid directly to doctors. This may have been a factor in the BMA decision to reopen negotiations which may lead to the abolition of the refund system. Certainly the profession cannot indefinitely stand fast on the "principle" adopted in 1941, and reiterated in 1945, "to practice as hitherto and enable patients to claim a refund of the statutory fee." (42)

C. *Salaried Service.* The Social Security Act empowers the Minister of Health to make special arrangements in order to provide medical services for people living in remote areas. This has been provided mainly by salaried medical officers. The base salary is high enough to attract young doctors into sparsely populated back-blocks that would have little chance of medical service under ordinary conditions. The salaries offered range from £1,100 to £1,700 per year, and the doctors are also permitted to charge fee-for-service for patients not ordinarily resident in the district. Eighteen physicians were in the salaried service in 1946.

One critic of the New Zealand system of medical care regards salaried personnel for remote areas as "logical and satisfactory." (43) The BMA committee opposes this salaried service, however, and proposes that the back-blocks should be served by private practitioners, using the fee refund method, and collecting mileage from the social security fund. (44)

Fear of a universal salaried service, in the long run, may be a potent factor in making the organized profession adopt a more conciliatory attitude toward the Government proposals. The wholesale use of salaried service is unlikely to be resorted to by

any Government without extreme provocation. During the war the shortage of doctors in the country gave the profession extraordinary bargaining power. The return of physicians from the armed forces and the graduation of new doctors from medical school is rapidly correcting the deficiency in medical personnel. If a complete break should occur between Government and BMA, it is conceivable that a general salaried service could be recruited from Great Britain and from those willing to cooperate within the Dominion.

PHARMACEUTICAL BENEFITS

The promise of "free medicines" was redeemed with the inauguration of pharmaceutical benefits in May, 1941. The Minister of Health entered into contracts with pharmacists, who agreed to fill prescriptions of medical practitioners for persons covered by the act. Pricing of each prescription is done according to a "drug tariff" issued by the Department. In practice, employees of the Department price every ingredient in each prescription, and then add the cost of container and the chemist's profit. A tremendous staff, estimated at 100 for the Dominion, is required to price prescriptions and reimburse pharmacists for services under the act. It is estimated that around 90 per cent of all prescriptions in the country are paid for by the fund.

The cost of pharmaceutical benefits has been surprisingly high. The first full year of operation, 1942–1943, the cost was £563,247; for 1943–1944, £762,198; for 1944–1945, £980,237; and for 1945–1946, £1,133,366. (45) The large size of the drug bill is regarded by the Department as "very disquieting." For 1945–1946 the pharmaceutical benefits cost nearly as much as medical practitioner services. In one sense, it is the medical profession that must bear responsibility for over-prescribing; there are innumerable instances of unnecessary and expensive prescribing. Actually, there are administrative procedures that can be adopted to reduce both abuses and cost of administration. The best hope seems to be the adoption of a set formu-

lary from which doctors can prescribe, eliminating unusual and expensive ingredients.

SUPPLEMENTARY BENEFITS

X-ray diagnostic services were started in August, 1941. At first limited to radiological services provided by Hospital Boards, in 1942 benefits were extended to such services provided by private practitioners. Those in private practice are divided into two groups: "absolute" recognition is extended to practitioners who are permitted to do all classes of radiological work; "limited" recognition is granted to those permitted to do only certain classes of work. Two sets of fees are in use: one for those with absolute recognition and one for those with limited. Radiological work done by Hospital Boards is paid for on the limited scale of fees. Claims for x-ray services are made by practitioners directly against the fund. Since 1944 the fund has paid more than £100,000 per year for radiological services.

Massage services, begun September, 1942, are available to patients on the recommendation of medical practitioners. The contracts between Minister and masseur permit the latter to collect 3s. 6d. from the fund for each office treatment, but he is not permitted to charge the patient more than 3s. 6d. additional. Virtually every masseur in private practice has entered contracts to provide service under the act. For the last two years, massage services have cost the fund more than £30,000 annually.

District nursing benefits, introduced in September, 1944, make free to the patient the nursing services provided by Hospital Boards, various Departments, and subsidized associations. For 1945–1946 the cost to the fund for these services was £58,880.

Domestic assistance will be provided at fund expense under certain circumstances when a mother is incapacitated. Payment is made in the form of a subsidy to an association which provides such service.

School Hygiene

Although the School Medical Service was established thirty-

five years ago, work in the field of school hygiene has expanded greatly since the Labor Government came to power in 1935. The early work of the Division of School Hygiene was confined largely to conducting physical examinations of primary school children, a function that still looms as very important in the school health program. The division aspires to examine school children three times during their primary careers: at entry, midway, and at graduation. Operating with only fourteen medical officers out of an authorized strength of twenty-four, the division conducted over 75,000 medical examinations of primary pupils during 1945. (46) Approximately 40 per cent were found defective in one or more particulars; nearly 10 per cent suffered from subnormal nutrition. Pre-school children are also examined; in 1945 just under 7,500 tots received medical inspection. Diphtheria and whooping cough immunizations are given to both pre-school and primary children.

Among the innovations of the Labor Government in child health are the milk-in-schools scheme, free apples, health camps, and aggressive health education campaigns. The free milk plan was started in 1937 in order to induce children to consume more milk of good quality. When available, milk that is fresh, bottled, and pasteurized is served once daily to primary pupils. In areas where safe fresh milk is not available, supplies of powdered or malted milk may be furnished. During 1946 horse-racing enthusiasts attributed the lack of light-weight jockeys on the race course to the school milk program. The free apple scheme was started in part to relieve the market of a surplus that developed when war in 1939 cut off export markets. It is now a permanent feature of the school health program.

The health camp movement has developed extensively during the past ten years. School children with correctable defects are selected by the school health officers and nurses to spend periods in the camps. Some are operated the year around, but most are summer camps. The camps are supported in part through sale of special "health camp" stamps which may be used for postage.

Since the appointment of an outstanding and aggressive director of the Division of School Hygiene in 1940, a persistent campaign of health education has been conducted. The long-run program centers around the school child. Every effort is made to expose him to the best information on health matters. The walls of every school room in the land are hung with posters that exhort pupils to "Drink More Milk," "Get Your Vitamin C," "Eat Those Vegetables." Teacher training colleges have elevated health education to an important position, and in due course New Zealand's teachers will be fully prepared to lead school children in matters of health.

Work done with pupils, however effective, is not enough. The child's food and other habits are determined largely in the home, so if progress is to be made in this generation, parents must be educated too. If the father and mother are unsympathetic with the health lessons taught to the child, the learning is unlikely to "stick." Therefore many channels have been used to inform parents and the general public. Posters and placards are used in public buildings, railways, trams, and busses. Radio broadcasts are used to hammer home the story of health. The director himself did a three minute early morning broadcast, beamed to fathers, daily for four years. A longer program is heard over national network weekly. The division also conducts a travelling "health show," a fairly elaborate modern museum utilizing demonstrations, exhibits, lecturettes, and films with sound. During the day, this show is used for adolescent children; in the evenings it draws adults. The show is popular and is considered one of the most effective means of reaching the general public.

Dental Service

The School Dental Service, now the National Dental Service, in 1946 celebrated its twenty-fifth anniversary. It was established in 1921 to make available to school children the early attention to teeth that is required to combat dental caries, which the director of the service has called "the most prevalent dis-

ease afflicting civilised peoples." (47) New Zealanders have notoriously poor teeth. Men inducted into the armed services in World War II were found to run 50 to 60 per cent with artificial dentures and 23 per cent complete upper and lower sets. (48) Of the 75,000 primary school children examined in 1945, only 2.99 per cent of the European and 6.43 per cent of the Maori children had perfect teeth; of the 7,500 pre-school youngsters examined, 7.48 per cent had caries. (49)

Perhaps the three most distinguishing features of New Zealand's Dental Service are the use of dental nurses, the comprehensiveness of its coverage, and the support of the dental profession. The idea of training and using dental nurses was conceived by Thomas A. Hunter, first director of the service, who recognized how slow would be the development if reliance had to be placed upon dentists, who were short in supply and whose level of compensation would soon exhaust available funds. Therefore primary reliance was placed upon young women, who receive two years of training and then are deemed qualified to conduct ordinary clinical operations under the general supervision of dental officers. The nurses fill teeth, make extractions, and perform other operations that usually would be done by a professional dentist. At first the dental profession was not fully convinced that dental nurses should be given such responsibilities, but eventually it was won over. (50) Students entering the Dental Service agree to serve a minimum of five years, two as student and three as dental nurse. Trainees are paid a small salary, and those that live outside Wellington, where the training center is located, receive a lodging allowance. In 1946 there were over 400 dental nurses at work in the country and nearly 200 more in training.

Free dental service is provided to pre-school and primary school children, and in 1946 free service was extended to adolescents, gradually to be extended up to age 19. During 1945, 210,920 children were treated, of whom less than 25,000 were of pre-school age. (51) The total number of operations was over one and one-half millions, of which over one million were fill-

ings. The immediate goal is the service every six months of every person in the Dominion up to age of 19. Post-school young people will be served by private practitioners on a fee-for-service basis until sufficient dental officers can be secured for the service. To facilitate the recruiting of dentists, the Dental Service is offering bursaries to dental students at the University of Otago; students agree to accept public appointments after graduation for designated periods, varying with the amount of bursaries received. In 1946 there were some seventy-six students in the dental school on state bursaries. (52)

It is unusual for a profession to permit persons less fully trained to practice any part of their art without viewing with alarm or protest. In this regard the New Zealand dental profession is indeed remarkable, for a state service has been developed that soon will cover nearly one-third of the population of the country, and a large share of that service is carried out by dental nurses. One of the reasons for this situation may be the extraordinary need for preventive work in the dental field. Another factor may be that dentists have all the work that they can do. It may be due in part to the excellent leadership of the state dental service, which has never advanced too far ahead of the thinking of the profession to fall into conflict with it. In any case the expansion of the service has been attended by the good wishes and active support of the overwhelming majority in the profession. The gazetting of regulations governing the extension of the service to age 19 might have been an occasion for conflict between the profession and the Government, but there seemed to be an agreement as to necessity for increased coverage, scale of fees for private practitioners in the transitional period, and ultimate conduct by salaried dental officers.

Surprisingly little is known about the reasons for defective teeth. A dental research committee has been established under the Medical Research Council, and may produce, in the future, some significant light upon a very dark subject. The nutrition research committee under the Council has already published several studies that have an important bearing on tooth dis-

ease. Much of the responsibility for poor teeth is traced to faulty diet, but any considerable advance in this field must wait for the lessons of health education to penetrate the public consciousness and for other Government agencies to cooperate by making the right sort of foodstuffs available at reasonable prices.

Appraisal of the New Zealand Plan

Coming to power in 1935, the Labor Government proceeded to introduce legislation to carry into force the various planks of its platform. Among the matters on which it assumed it had a popular mandate was the provision of a national health service, including free medical, dental, hospital, and other care.

In Planning. In order to implement this promise, the Minister of Health, in July, 1936, appointed a National Health Insurance Investigation Committee to investigate the matter of providing medical and other treatment services. Although it held hearings through the country and collected the views of many interested persons, it cannot be regarded as an impartial and representative board of enquiry. This is the sort of task that traditionally has been performed by a Royal Commission in all British countries. Such a commission might have included top representatives of the medical profession and outstanding laymen from various walks of life. Its hearings would have commanded more widespread respect and attention than could those of a departmental committee, and service on the commission might have informed and modified the views of the leaders of the BMA.

Among the witnesses who appeared before the committee were representatives of the BMA, who presented a plan which was limited in its coverage and at variance with the Government's determination to introduce a universal scheme. The profession and the Government could not reach agreement on a common plan, and the blame for the impasse belongs in part to each. The profession probably was not consulted as fully and frankly as it had a right to expect. On the other hand, the

profession was unyielding and, despite the timely warning of Dean Hercus, did not keep in close touch with the development of the Government's plan.

In Launching. Before enacting legislation for a general social security scheme, of which health benefits were to be a part, the Government moved in the House of Representatives to create a select National Health and Superannuation Committee which was composed of both Government and Opposition members. The Committee received from the Prime Minister detailed proposals regarding social security, and confined its work largely to reviewing and approving the Government's plan. Further hearings were conducted, but heavy reliance was placed upon the work of the McMillan committee. Under the rules of the House, no minority report by opposition members of the committee was permitted, so the criticisms of the scheme had to be presented orally to Parliament and country.

The Social Security Act of 1938, which contained the health benefit provisions, was passed by the large majority which Labor then held in Parliament. When the capitation scheme of compensating general practitioners was placed in operation in March, 1941, the great majority of the profession refused to participate. In order to get medical benefits functioning, the Government instituted, in November, 1941, a fee-for-service plan. While the BMA was willing to have its members practice under the new plan, it urged them not to collect fees directly from the state fund, but to leave collection to the patient. This "refund" method appealed to the BMA because it kept direct Government intervention out of the doctor-patient relationship.

In Operation. The first phase of the health program, maternity benefits, which commenced in May, 1939, are now generally accepted by the profession and enjoy a large measure of public support. Concerning medical benefits, it is obvious that the capitation scheme will not be generally used by the profession so long as fee-for-service exists side by side with it. The latter assures the practitioner of compensation roughly

proportionate to services rendered; capitation imposes upon the doctor the indefinite obligation to provide all attendances required by the persons on his panel. Although the Government may still look upon the capitation system with nostalgic interest, the profession certainly would resist its reinstitution as the sole scheme of remuneration under the act.

Under fee-for-service, the direct claim plan has many advantages over the refund plan. The state, under direct claim, is relieved of unnecesary administrative expenses and a heavy burden of paper work. The patient is spared the nuisance of filling out forms, which he often does incorrectly, and delay in securing payment from the social security fund. The refund scheme is favored by the BMA, but it is difficult to see much validity in the argument that direct claim interferes with the doctor-patient relationship. The limited use of salaried medical officers in remote areas is certainly defensible.

Although the leaders of the organized medical profession persist in their emphasis upon abuses that have emerged in the operation of medical benefits, such as overvisitation, overprescribing, unnecessary calls by the patient, and the like, there are many in the profession and the public who stress the gains, such as seeking early medical advice as a right not as charity, eliminating the barrier of expense from extra consultation and treatment, and releasing the doctor from concern over collections.

Despite the controversy that attended its inception, we think that the New Zealand plan is a good start toward getting health services to all people regardless of their economic circumstances. We believe that most of the abuses and difficulties that have emerged could be remedied rather quickly if the Government and the medical profession would learn to cooperate with one another. The Government must recognize that professional men and women are entitled to an important voice in determining the conditions under which they shall work. The profession must understand that the feature of universal coverage of health services is highly popular with the people, and that the

doctors will lose in the long run if they adopt uncooperative attitudes.

Finally, we think that the whole field of health benefits should be subjected to searching enquiry by a Royal Commission, headed by a chairman, recognized generally by the public as competent and impartial, and on which the medical profession should have representation. A thorough investigation is needed before further expansion of services, and might do much to bring the Government and the BMA close enough to provide the basis for real cooperation which is prerequisite to proper functioning of the scheme.

References

1. The name comes from the wife of the then Govenor-General, Lady Plunket, who was patron of the movement.

2. *Maoriland Worker,* August 24, 1921.

3. *Maoriland Worker,* September 27, 1922, carries the text of the party's platform.

4. New Zealand Labor Party: Objective and Platform. (Mimeographed, no date but contains notation, "as amended at 1934 conference.")

5. New Zealand Labor Party: Labor's Election Policy. (Mimeographed, no date), p. 6. The term, "National Health Insurance Scheme" is used alternatively. Cooperation with the friendly societies, the medical, pharmaceutical, dental and nursing professions was pledged.

6. McMillan, D. G.: A National Health Service, new zealand of tomorrow. Wellington: New Zealand Labor Party, 1935, Foreword by Peter Fraser, p. 3.

7. McMillan, D. G.: *Op. cit,* p. 7.

8. *Ibid.,* p. 8.

9. Hercus, C. D.: Health Insurance in New Zealand. *New Zealand Medical Journal,* April, 1935, 34, pp. 85–97.

10. The letter appears in Appendix "B" of the report of the McMillan Committee, which was officially known as the "National Health Insurance Investigation Committee." Its *Report* was issued in mimeographed form on September 4, 1937.

11. *New Zealand Medical Journal:* October, 1938, 37, pp. 239–40.

12. National Health Insurance Investigation Committee: Report of . . . pp. 13–14.

13. New Zealand, House of Representatives: Appendix to the Journals, 1938, 1–6; "National Health and Superannuation Committee, Report of the . . . . ," p. 2.

14. *Op. cit.,* pp. 5–6.

15. *New Zealand Medical Journal:* October, 1938, 37, p. 242.

16. Robb, Douglas: Health Reform in New Zealand. Christchurch, Whitcombe & Tombs, 1947, p. 11.

17. 2 Geo. VI, 1938, No. 7.

18. Leaflet printed by The Standard Press, Wellington.

19. New Zealand Labor Party: 1938 General Election. (Mimeographed, no date), p. 2.

20. *New Zealand Medical Journal:* October, 1938, 37, p. 242.

21. *Standard:* April 13, 1939.

22. *Standard:* May 18, 1939.

23. *New Zealand Medical Journal:* January 31, 1939, Supplement, p. 9.

24. New Zealand House of Representatives: APPENDIX TO THE JOURNALS, 1940, vol. III, H–31, "Director General of Health, Annual Report of the . . . .," p. 7.

25. It is very difficult to compare New Zealand and American profesional fees. On the current exchange, NZ£1 = U.S. $3.26; 10s. (shillings) = $1.63; 1s. = 16.3¢; 1d. (penny) = 1.36¢. To get a true picture, however, one must consider buying power. An American dollar (6s. 2d.) will buy four pounds of butter or about twenty-five pounds of bread or an eight-pound beef roast. Rent is cheaper than in the United States. Manufactured goods cost more. All things considered, the average physician in New Zealand makes a good living and probably occupies a higher income level than any other trade, profession, or group in the Dominion.

26. New Zealand House of Representatives: APPENDIX TO THE JOURNALS, 1943, H–31, "Director General of Health, Annual Report of the . . . .", p. 6.

27. *New Zealand Medical Journal:* February, 1947, 46, pp. 56–57.

28. Robb, Douglas: *Op. cit.*, p. 17, estimates 40 or 50.

29. Figures from annual reports, APPENDIX TO THE JOURNAL.

30. New Zealand House of Representatives: APPENDIX TO THE JOURNALS, H-31, "Director General of Health, Annual Report of the . . . .," p. 11.

31. *New Zealand Medical Journal,* October, 1945, 44, Supplement, pp. 3–4.

32. *Standard:* April 16, 1942.

33. Medical Planning Committee, Draft Final Report *New Zealand Medical Journal,* July, 1944, 43, Supplement, p. 8.

34. Medical Planning Committee, Draft Final Report. *Op. cit.*, p. 7.

35. Report of Referendum Sub-Committee. *New Zealand Medical Journal,* October, 1945, 44, Supplement, pp. 3–4.

36. Report of Referendum Sub-Committee. *Op. cit.*, pp. 3–4.

37. Medical Planning Committee, Draft Final Report. *Op. cit.*, p. 7.

38. *New Zealand Medical Journal:* February, 1945, 44, pp. 54–56.

39. Report of Referendum Sub-Committee. *Op. cit.*, pp. 3–4.

40. February, 1945, 44, pp. 49–53.

41. *New Zealand Medical Journal:* April, 1946, 45, p. 130.

42. *Ibid.*, April, 1945, 44, p. 116.

43. The New Zealand Experiment. *Journal of the American Medical Association,* April 13, 1946, 130, p. 1017.

44. Medical Planning Committee, Draft Final Report. *Op. cit.*, p. 8.

45. New Zealand House of Representatives: APPENDIX TO THE JOURNALS, 1946, H–31, "Department of Health, Annual Report of the Director-General of Health," p. 25.

46. ANNUAL REPORT OF THE DIRECTOR-GENERAL OF HEALTH, 1946, pp. 14–15.

47. Saunders, J. Ll: The Dental Problem in New Zealand in Relation to the Modern Conception of Health Services. *New Zealand Dental Journal*, April, 1946, 42, p. 46.

48. Saunders: *Ibid.*, p. 46.

49. ANNUAL REPORT OF THE DIRECTOR-GENERAL OF HEALTH, 1946, pp. 14–15.

50. Editorial, *New Zealand Dental Journal,* July, 1944, 40, p. 60.

51. ANNUAL REPORT OF THE DIRECTOR-GENERAL OF HEALTH, 1946, p. 26.

52. Saunders; *Op. cit.*, p. 51–52.