

## **Interim report of the Departmental Committee on Tuberculosis.**

### **Contributors**

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DEPARTMENTAL COMMITTEE ON TUBERCULOSIS.

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INTERIM REPORT

OF THE

DEPARTMENTAL COMMITTEE

ON

TUBERCULOSIS.

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Presented to Parliament by Command of His Majesty.

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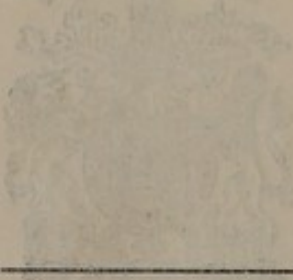
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# CONTENTS.

	PAGE
TERMS OF REFERENCE AND CONSTITUTION OF THE COMMITTEE -	3
INTRODUCTION - - - - -	4-5
POWERS OF EXISTING LOCAL AUTHORITIES IN ENGLAND AND WALES	5-7
VOLUNTARY SOCIETIES - - - - -	7
THE NATIONAL INSURANCE ACT - - - - -	7-9
GENERAL PRINCIPLES OF TREATMENT - - - - -	9, 10
BASIS OF THE SCHEME RECOMMENDED FOR THE UNITED KINGDOM	10, 11
FIRST UNIT OF THE SCHEME—TUBERCULOSIS DISPENSARIES -	11-14
SECOND UNIT OF THE SCHEME—SANATORIA, HOSPITALS AND OTHER INSTITUTIONS - - - - -	15, 16
NON-PULMONARY TUBERCULOSIS - - - - -	16
VOLUNTARY INSTITUTIONS - - - - -	17
DUTIES AND QUALIFICATIONS OF HEADS OF DISPENSARIES AND SANATORIA - - - - -	17
POSITION OF GENERAL MEDICAL PRACTITIONER - - - - -	17, 18
CHILDREN - - - - -	18, 19
ADMINISTRATION IN ENGLAND AND WALES - - - - -	19-21
POSITION OF WALES - - - - -	21, 22
POSITION OF SCOTLAND - - - - -	22-24
POSITION OF IRELAND - - - - -	24-26
FINANCE - - - - -	26
FINANCIAL RECOMMENDATIONS - - - - -	27
SUMMARY OF PRINCIPAL RECOMMENDATIONS - - - - -	27-28



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## TERMS OF REFERENCE.

To report at an early date upon the consideration of general policy in respect of the problem of tuberculosis in the United Kingdom, in its preventive, curative, and other aspects, which should guide the Government and local bodies in making or aiding provision for the treatment of tuberculosis in sanatoria or other institutions or otherwise.

## CONSTITUTION OF THE COMMITTEE.

By Minute of 22nd February 1912 the following members were appointed :—

WALDORF ASTOR, Esq., M.P. (Chairman.)

CHRISTOPHER ADDISON, Esq., M.P., M.D.

N. D. BARDSWELL, Esq., M.D.

DAVID DAVIES, Esq., M.P.

A. MEARNS FRASER, Esq., M.D.

ARTHUR LATHAM, Esq., M.D.

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JOHN C. McVAIL, Esq., LL.D., M.D.

W. J. MAGUIRE, Esq., M.D.

SIR GEORGE NEWMAN, M.D.

ARTHUR NEWSHOLME, Esq., C.B., M.D.

JAMES NIVEN, Esq., LL.D., M.B.

MARCUS PATERSON, Esq., M.D.

R. W. PHILIP, Esq., M.D.

H. MEREDITH RICHARDS, Esq., M.D.

T. J. STAFFORD, Esq., C.B., F.R.C.S.I.

Miss JANE WALKER, M.D.

J. SMITH WHITAKER, Esq.

F. J. WILLIS, Esq. (Secretary).

On 18th March ARTHUR HENDERSON, Esq., M.P., and F. J. WILLIS, Esq., were appointed members of the Committee, and O. B. CLARKE, Esq., was appointed Secretary.



## DEPARTMENTAL COMMITTEE ON TUBERCULOSIS.

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TO THE LORDS COMMISSIONERS OF HIS MAJESTY'S TREASURY.

### INTRODUCTION.

1. The Committee appointed by your minute of 22nd February 1912, "to report at an early date upon the considerations of general policy in respect of the problem of tuberculosis in the United Kingdom, in its preventive, curative, and other aspects, which should guide the Government and local bodies in making or aiding provision for the treatment of tuberculosis in sanatoria or other institutions or otherwise," desire to submit the following observations and recommendations as an Interim Report.

The object of the Committee has been to take into consideration the existing machinery and funds available, and to indicate the lines upon which, in their view, a national and comprehensive scheme for combating tuberculosis in all its forms may be established and developed.

2. The production of such a scheme needs much inquiry and deliberation, and the Committee desire that this report should not be taken as the final expression of their views upon the problem in all its details. This is an Interim Report, rendered necessary by the fact that the National Insurance Act, 1911, with its important provisions with regard to tuberculosis, comes into operation on July 15, 1912. Preliminary arrangements will have shortly to be made, both centrally and locally, and the Committee deem it of great importance that any steps taken under that Act by any of the authorities or bodies concerned should be in general harmony with the scheme which they desire to recommend. This report will, therefore, deal mainly with the essential features and broad lines of a comprehensive scheme, with special reference to the practical steps which should be taken in the near future, for the provision of immediate treatment for the existing tuberculous population according to our present knowledge.

3. In order that the field of inquiry of the Committee may properly be appreciated, it is necessary to indicate briefly a few general aspects of the problem with which the Committee is called upon to deal. The facts as to the prevalence of tuberculosis in the United Kingdom, the mortality due to the disease, and the general suffering and economic waste which it causes, have become so far matters of common knowledge that it would be out of place in a report of this nature to furnish statistics. It is sufficient to say that the disease has a wide prevalence, and that a large proportion of the population has, at some time or other, developed tuberculosis, although it may have remained latent and unrecognised. The seeds of the disease have been present, but in many cases the dose of infective material has been too small to produce active disease or the resisting power of the body into which they have been introduced has been sufficient to protect it from a well-defined attack. The problem of the prevention and treatment of the disease presents, therefore, two aspects, that of the seed of the disease, and that of the soil in which the seed may be planted.

With regard to the seed of the disease, it is now generally accepted that both the human and bovine types of the bacillus of tuberculosis are capable of giving rise to the disease in human beings. The question whether the introduction of these bacilli into the human body, will result in the production of definite disease depends largely upon the amount and virulence of the infective material invading the vulnerable tissues of the body and the condition and degree of activity of the defensive forces of the body. Certain factors tend to weaken those defensive forces and thus to render the body less able to resist the infecting organisms. Among these factors may be cited (1) the constitution of the individual; (2) the surroundings in which he lives; (3) his standard, habits, and method of life; (4) the nature of his occupation or employment; (5) the diseases and accidents to which he has been subjected. It should be added that the disease has its own peculiar age incidence in regard to which there are, of course, a considerable variety of operative factors.

A discussion as to the origin, and possible elimination, of the seeds of the disease, or of the relation of the several factors aforesaid to the general problem of



tuberculosis, is not within the scope of this Report. The Committee, however, desire it to be understood that these matters have not been overlooked in preparing the scheme which is hereinafter described, and that they hope to deal with them as may be required when their Final Report is submitted.

4. Any scheme which is to form the basis of an attempt to deal with the problem of tuberculosis should provide—

- (1) That it should be available for the whole community.
- (2) That those means which experience has proved to be most effective should be adopted for the *prevention* of the disease.
- (3) That a definite organization should exist for the *detection* of the disease at the earliest possible moment.
- (4) That, within practicable limits, the best methods of *treatment* should be available for all those suffering from the disease.
- (5) That, concurrently with the measures for prevention, detection, and treatment, provision should be made for increasing the existing knowledge of the disease and of the methods for its prevention, detection, and cure by way of *research*.

5. In view of the particular circumstances which necessitate the submission of this Interim Report the Committee trust that it will be recognised that the present recommendations must deal with certain aspects of prevention, and with detection, and treatment rather than with research. The latter subject, on the importance of which the Committee wish to lay stress, will be dealt with in greater detail in the Final Report, after the Committee have had further opportunity of obtaining and studying the views of various experts whom they are consulting. The Committee desire, however, to express their opinion that the scheme which they recommend in this report, for assistance in the formation of which they desire to express their indebtedness to those who have placed suggestions and information before them, will be calculated to afford material assistance to the cause of research.

6. The Committee have endeavoured to devise a scheme in which may be united or correlated the activities of the various bodies, authorities, and persons concerned, so as to ensure that adequate provision for the prevention and treatment of the disease should be made available on a systematic basis, as far as possible uniform in character, but not necessarily identical in detail, throughout the United Kingdom.

They recognise that a reasonable measure of latitude and elasticity is necessary in order to suit the varying local conditions in each of the four countries, especially having regard to the existing agencies available for dealing with tuberculosis.

#### POWERS OF EXISTING LOCAL AUTHORITIES IN ENGLAND AND WALES.

7. In addition to the medical profession and to voluntary societies, the existing bodies at present engaged, in greater or less degree, in dealing with tuberculosis in England and Wales are—

- County Councils.
- Sanitary Authorities and Joint Hospital Boards.
- Local Education Authorities.
- Poor Law Authorities.
- The Metropolitan Asylums Board.

The powers of local authorities in Scotland and Ireland are set out in the separate sections dealing with these countries.

#### *County Councils.*

8. The county councils have jurisdiction over the whole administrative county (which does not include the county boroughs), for various public health purposes, and in particular, under the Isolation Hospitals Act, 1893, have power to provide hospitals for infectious diseases, among which tuberculosis may, after compliance with the terms of section 7 of the Infectious Disease (Notification) Act, 1889, be included. This power has not been exercised by any county council as regards tuberculosis, but certain councils have established bacteriological laboratories, in which they carry out the examination of sputum for medical practitioners in the area. Every county council under the Housing, Town Planning, &c., Act, 1909, is required to appoint a medical officer of health, and several county medical officers of health have already drawn up schemes for dealing with tuberculosis in their county in anticipation of the work which may devolve on county councils under the National Insurance Act.



*Sanitary Authorities.*

9. The sanitary authorities are, in London, the Common Council, and the metropolitan borough councils, outside London, the county borough councils, borough councils, and urban and rural district councils. They exercise in their several jurisdictions the powers of the Public Health Acts and regulations made under them, as to infectious diseases, hospital provision, housing, the milk and meat supply, &c., and since pulmonary tuberculosis has been recognised as an infectious disease, a number of authorities have taken additional steps to combat it from this point of view. Pulmonary tuberculosis has been made a compulsorily notifiable disease for the whole of England and Wales, and under regulations issued by the Local Government Board definite powers and duties are imposed upon sanitary authorities and their officers, for the administrative control of tuberculosis. The scope of these powers and duties can be gathered from Articles VIII. and IX. of the Public Health (Tuberculosis) Regulations, 1911, given below. These should be read in conjunction with all the clauses of the Public Health Acts relating to sanitation and to the control of infectious diseases.

Article VIII.—Upon the receipt of a notification under these Regulations or under the Poor Law Regulations or under the Hospital Regulations the Medical Officer of Health, or an Officer acting under the instructions of the Medical Officer of Health, shall make such inquiries and take such steps as may appear to him to be necessary or desirable for preventing the spread of infection and for removing conditions favourable to infection.

Article IX.—(1) For the purposes of these Regulations and of the Poor Law Regulations and of the Hospital Regulations a Council, on the advice of their Medical Officer of Health, may supply all such medical or other assistance, and all such facilities and articles as may reasonably be required for the detection of Pulmonary Tuberculosis, and for preventing the spread of infection and for removing conditions favourable to infection, and for that purpose may appoint such officers, do such acts and make such arrangements as may be necessary.

(2) A Council, on the advice of their Medical Officer of Health, may provide and publish or distribute in the form of placards, handbills, or leaflets, suitable summaries of information and instruction respecting Pulmonary Tuberculosis, and the precautions to be taken against the spread of infection from that disease.

It will be observed that by these regulations sanitary authorities have had conferred upon them the power of treating pulmonary tuberculosis in their homes in addition to their already existing powers of treating this disease in dispensaries and other institutions. Under these powers much work has already been done by sanitary authorities in the provision of hospital or sanatorium accommodation or of dispensaries and shelters by the authorities themselves, or, more generally, by a subscription to a sanatorium, or to a dispensary erected by a voluntary society, inspection of houses occupied by patients suffering from tuberculosis, examination of patients and "contacts," together with advice as to the prevention of the spread of infection, the provision of treatment by tuberculin, the bacteriological examination of sputum, the disinfection of premises and bedding, the making of byelaws for the prevention of spitting, the provision of other necessary appliances, and the distribution of leaflets and handbills giving instruction and advice with regard to the management of tuberculosis. The sanitary authorities have power to deal with overcrowding and insanitary conditions of dwellings, to control the milk supply and to stop the supply of tuberculous milk, and to seize and condemn tuberculous meat exposed for sale. These powers they exercise through their medical officers of health, sanitary inspectors, and health visitors.

*Local Education Authorities.*

10. The local education authorities are the councils of boroughs which had a population of over 10,000 and of urban districts which had a population of over 20,000 at the census of 1901, and for the rest of the administrative county, the county council. The local education authorities are required by statute to undertake the periodical medical inspection of the children attending the public elementary schools in their districts. They have also powers of treatment under sanction of the Board of Education. Under this power some 50 local education authorities have now established school clinics at which treatment and advice is given, and several have established day or residential sanatorium schools for children suffering from tuberculosis. There are also open-air day schools for debilitated children, and numerous day schools for cripples and other physically defective children, many of whom



are tuberculous. It should be added that the Education (Provision of Meals) Act, 1906, is administered by the local education authorities, which thus may provide for the treatment of children suffering from malnutrition, one of the chief predisposing conditions of tuberculosis.

#### *Poor Law Authorities.*

11. The poor law authorities are the boards of guardians for the poor law unions into which England and Wales are divided, areas consisting of parishes or groups of parishes and not necessarily coterminous with the boundaries of counties or sanitary districts. It is their duty to provide medical relief for persons who are necessitous, and as destitution is frequently associated with tuberculosis, a large number of cases of tuberculosis are to be found in their infirmaries and sanatoria. The majority of the cases found in poor law infirmaries and sanatoria are of the advanced and incurable type, but some earlier cases are also treated. The guardians also have power in certain circumstances to give out-relief to sufferers from tuberculosis and to their dependants.

#### *Metropolitan Asylums Board.*

12. Considerable provision for London children chargeable to the guardians of the poor suffering from various forms of tuberculous diseases has been made in recent years by the Metropolitan Asylums Board.

#### *VOLUNTARY SOCIETIES.*

13. A great deal has been done by voluntary societies and bodies for the treatment and prevention of tuberculosis. Most of the sanatoria and some of the dispensaries now existing for this disease have been provided out of private charity and many are still maintained by voluntary contributions. In several of these institutions, beds have been subscribed for by local authorities for the use of patients from their districts whom it is desirable to send to sanatoria. Voluntary societies also provide health visitors and nurses, often in co-operation with the sanitary authority, to visit and attend tuberculous patients, and afford assistance to families that have become impoverished through tuberculosis. They also endeavour to educate public opinion with regard to tuberculosis by the distribution of leaflets and placards, and by lectures, exhibitions, etc.

#### *THE NATIONAL INSURANCE ACT, 1911.*

14. The resources for attacking the problem of tuberculosis have been strongly reinforced by the passing of the National Insurance Act. The Act, which applies throughout the United Kingdom, deals with (1) treatment; (2) erection of sanatoria and other institutions; (3) research; (4) education.

##### *(1) Treatment.*

Section 59 creates an Insurance Committee for every county and county borough. Regulations to be made by the Insurance Commissioners must require the Insurance Committee of every county to prepare after consultation with the county council and submit for the approval of the Commissioners a scheme for the appointment of district insurance committees for the county, and prescribing the area to be assigned to each such committee.

This scheme must in any case provide for the appointment of a district insurance committee for each borough (including the City of London and a metropolitan borough) within the county having a population of not less than 10,000 and for each urban district within the county with a population of not less than 20,000, subject to any arrangements for grouping with adjoining districts.

Section 16 requires Insurance Committees to make arrangements with a view to providing treatment for insured persons suffering from tuberculosis (a) in sanatoria and other institutions, with persons or local authorities (other than poor law authorities) having the management of sanatoria or other institutions approved by the Local Government Board; (b) otherwise than in sanatoria or other institutions, with persons and local authorities (other than poor law authorities) undertaking such treatment in a manner approved by the Local Government Board. The arrangements made by the Committees must be to the satisfaction of the Insurance Commissioners.

The same section provides, for the purpose of defraying the expense of providing this treatment, the sum of 1s. 3d. per annum in respect of each insured person payable out of the insurance fund. A further sum of one penny in respect of each insured person is available from the Exchequer, but may be allocated by the Insurance Commissioners to research.



It is estimated that the number of persons in the United Kingdom who will become insured will be a little over 14,000,000. The income of Insurance Committees for this purpose should, therefore, be about 880,000*l.* per annum (excluding the sum which may be appropriated to research). This figure will, of course, rise in proportion to the natural increase of the insured population.

The section further provides that insured persons cannot claim treatment as a matter of right, but must be recommended for sanatorium benefit by the appropriate Insurance Committee.

Section 17 enables Insurance Committees, if they think fit, to extend similar treatment to the dependants of insured persons or to any class of such dependants. It further provides that if the sums made available by section 16 are not sufficient to provide for the treatment of such dependants the deficit may be made up in equal shares out of moneys provided by Parliament and out of moneys derived from the county or borough rates, provided that the expenditure occasioning the deficit has received the sanction both of the Treasury and of the council of the county or county borough.

Section 22 enables borough, or urban, or rural district councils to agree to repay to the county council the whole or any part of the sums payable by the county council under section 17, so far as such sums are properly attributable to the borough or district.

Section 64 (4) enables Insurance Committees to enter into agreements with any person or authority (other than a poor law authority) that, in consideration of such person or authority providing treatment in a sanatorium or other institution or otherwise, the Committees will make annual or other payments, subject to such conditions and for such period as may be agreed, towards the maintenance of the institution or provision of treatment.

#### (2) *Finance, Erection of Sanatoria, &c.*

Section 64 (1), read in connection with section 16 (1) (b) of the Finance Act, 1911, makes available a sum of 1,500,000*l.* for the purpose of the provision of and making grants in aid to sanatoria and other institutions in the United Kingdom. These grants are to be distributed in England, Scotland, and Ireland by the Local Government Board, with the consent of the Treasury, who, in turn, are to consult the Insurance Commissioners before giving their consent. In Wales the distribution is in the hands of the Welsh Insurance Commission subject to the consent of the Treasury. It is to be observed that the institutions to which grants may be made are not confined to institutions for the use of insured persons. The money is available for the provision of institutions for the use of the whole population. The 1,500,000*l.* is to be apportioned between England, Wales, Scotland, and Ireland in proportion to their respective populations, according to the census of 1911. Thus, roughly, about 1,116,000*l.* will be apportioned to England, 81,000*l.* to Wales, 158,000*l.* to Scotland, and 145,000*l.* to Ireland.

Provision is also made in this section for the Local Government Board (1) to authorise county councils to provide, manage, and maintain institutions, and (2) to make orders for the constitution of joint committees, joint boards, &c., between county councils, county borough councils, and other local authorities for the purpose of facilitating co-operation.

By section 77 the Local Government Board may, for the purposes of their powers and duties under Part I. of the Act, hold such local inquiries and investigations as they may think fit. The section further provides (1) that any approval given by the Local Government Board may be given for such term and subject to such conditions as the Board may think fit, and that the Board shall have power to withdraw any approval which they have given, (2) that the Board may make it a condition of any approval given or grant of money to be made, that the Board shall have such powers of inspection as may be agreed.

#### *Research.*

By section 16 (2), ~~as~~ has already been stated, a sum of one penny per annum per insured person is provided by the Exchequer, and may be retained by the Insurance Commissioners for research. This sum should amount to about 58,800*l.* per annum, increasing in proportion to the natural increase in the number of persons insured.

#### *Education (by means of the spread of Information).*

By section 60 a duty is cast upon Insurance Committees to make such reports as to the health of insured persons as the Insurance Commissioners, after consultation with



the Local Government Board, may prescribe, and to furnish statistical and other returns, &c., which in turn are to be forwarded by the Insurance Commissioners to the local authorities affected or interested. Insurance Committees must also make provision for lectures and the publication of information on questions relating to health, either directly or through existing local education authorities, universities, or other institutions.

It must, of course, be borne in mind that the duties of Insurance Committees under this section, so far as they relate to matters of health, are not confined to tuberculosis.

#### *Insurance Committees and Medical Officers of Health.*

By section 60 (2) Insurance Committees are authorised to obtain the advice and assistance of any Medical Officer of Health, with the consent of his council, in the exercise and performance of their powers and duties under the Act.

#### GENERAL PRINCIPLES OF TREATMENT.

15. Before entering upon a detailed examination of the scheme to be recommended, the Committee desire to offer some observations of a general character as to the nature and meaning of sanatorium treatment.

"Sanatorium benefit" in the National Insurance Act, 1911, means treatment in sanatoria or other institutions or otherwise. The expression is not used in the restricted sense of a course of treatment carried out in an institution called a sanatorium. Similarly the expression "sanatorium treatment" has an equally wide significance. The principles of treatment, which have been elaborated for the most part in sanatoria, have a wide application outside these special institutions. The advantages of this form of treatment can, in many instances, be given to patients who are living in their own homes or in shelters. In some of these cases it may be desirable to secure that the patient should be provided with additional food, or a separate room or bed, in order to ensure efficient treatment. Under suitable conditions, especially if the treatment is being carried out under the advice of a medical man with special knowledge of modern methods, home treatment may be, in all essentials, sanatorium treatment.

Sanatorium treatment may be considered from the points of view of (1) education and (2) therapeutics, though in practice they should be complementary to each other, and are, indeed, inseparable.

The therapeutic measures employed are, broadly, those which tend to diminish infection and to increase the patient's resistance. To this end, the patient should be protected, as far as practicable, from continued infection and should be freed from all debilitating conditions, such as impure air, insufficient food, &c. He should be provided with an abundance of pure air and light. He should have a sufficient amount of nourishing food. The amount of exercise and rest, the time that may be given to employment and recreation, the nature of the employment and recreation, in short, every detail of the daily life, must be inquired into carefully, and regulated according to the requirements of each individual patient. To these general measures of treatment may be added the use of tuberculin and other remedies.

From the preventive side it is necessary that the patient should receive a sound education in what may be called the hygiene of the treatment, and this can best be obtained by a course of institutional treatment. During the course of his treatment the patient should be taught the meaning and reason of the advice given, and at the same time should be instructed in the chief facts relating to his disease, its dangers, and the means of their prevention, and the rules of life necessary for the maintenance of his own health and for the safety of those with whom he is brought into contact. In a sanatorium frequent lectures should be given by the resident staff on these points. Similar information should be given in leaflet form to patients attending dispensaries or other institutions.

From the curative side of the question, there can be no doubt that the more constant the medical supervision exercised, the better are the results obtained.

Sanatorium treatment must be taken as a whole, and due weight must be given to each detail, whether it be included under the heading of education, hygiene, medical supervision, &c.

The belief that any considerable proportion of consumptives may safely depend on any one factor of the treatment to the exclusion of the others, such, for instance, as satisfactory housing, adequate nutrition, the sanatorium, or tuberculin, is a mistake, and, if acted upon, is likely to diminish the value which may be expected to accrue



from each and all of these when used in proper conjunction. In a large number of instances of pulmonary tuberculosis it is impossible to estimate the probable effect of treatment in a sanatorium without an opportunity of observing each individual case. Without prejudging the question as to whether sanatorium treatment should be carried out at the patient's home, in a hospital, or in a sanatorium, it may be said that under existing conditions most patients suffering from pulmonary tuberculosis would be given their best chance by a period of treatment in a sanatorium. It should, however, be borne in mind that a short stay in an institution in which the patient may be educated, followed by a course of home treatment, in shelters, &c., under close medical supervision, is a form of sanatorium treatment which has certain advantages and which may successfully be adopted in a large number of cases.

The success of treatment in sanatoria has, no doubt, been adversely influenced in the past by—(1) the ignorance of the public concerning the significance of early symptoms; (2) the lack of facilities for early diagnosis; (3) the admission to and continued treatment in sanatoria of unsuitable cases; (4) ineffective or insufficient after-care; (5) the fact that so many sanatoria have been unable to attract the services of medical officers possessing an expert knowledge of the work, and that in consequence, many sanatoria have been conducted as convalescent homes rather than as institutions in which efficient treatment has been given.

#### *Classification of Patients.*

16. For the purposes of this Report cases of pulmonary tuberculosis may roughly be divided into six classes:—

- (1) Cases in which the disease can be diagnosed or is strongly suspected, but in which there is no evident impairment of the working capacity.
- (2) Cases of recent onset with some impairment of the working capacity, but without marked evidence of ill-health.
- (3) Cases of recent onset with evidence of acute illness.
- (4) Cases of a longer history of illness. In some of these cases permanent arrest of the disease may be hoped for, but in the majority, restoration to full working capacity for more than a comparatively short period is not to be looked for.
- (5) Cases in which there is permanent loss of working capacity. Many of these patients live for a considerable period in a condition of chronic ill-health.
- (6) Cases in which a fatal termination within six months is probable.

This classification is necessarily imperfect, as some cases may undergo rapid change, and may subsequently have to be transferred from one class to another. The classification is a broad one, and forms a sufficiently practical basis for exemplifying the manner in which the tuberculosis dispensary may, as explained later on, exercise its functions as a clearing house.

Different arrangements will be required for the treatment of these different types of case. Treatment in sanatoria will chiefly be necessary for cases falling within classes 2, 3 and 4 and for a small proportion of cases falling within classes 1 and 5. It is, however, impossible to lay down a hard-and-fast rule on this point. The broad lines only can be suggested, and it must be remembered that the ultimate success of any scheme of treatment must depend to a large extent on its elasticity.

The Committee desire to recommend that the selection of cases for treatment in a sanatorium should be made, as far as possible, in association with the medical superintendent of the sanatorium.

#### *BASIS OF THE SCHEME RECOMMENDED FOR THE UNITED KINGDOM.*

17. The scheme which the Committee desire to recommend for the prevention, detection and treatment of the disease is intended to complete existing public health administration in respect of tuberculosis, and is based on the establishment and equipment of two units related to the general public health and medical work carried on by the Medical Officers of Health as described later and working in harmony with the general practitioner. The first unit consists of the tuberculosis dispensary, or an equivalent staff as set out in this Report. The second unit consists of the sanatoria, hospitals, etc., in which institutional treatment is given. The precise functions of the tuberculosis dispensary are dealt with in the next succeeding section



of the report. The Committee are of opinion that the tuberculosis dispensary should be the common centre for the diagnosis and for the organisation of treatment of tuberculosis in each area, at which the various bodies and persons connected with the campaign against tuberculosis will be brought together. The aim should be that no single case of tuberculosis should remain uncared for in the community, and that whatever services the scheme provides should be available for all cases of the disease. Next to the tuberculosis dispensary should stand the second unit, consisting of a system of Sanatoria, Hospitals, Farm Colonies, Open-air Schools, etc. The tuberculosis dispensary should be linked up to these institutions for which it will act as a clearing-house.

### THE FIRST UNIT IN THE SCHEME.

#### FUNCTIONS OF THE TUBERCULOSIS DISPENSARY.

18. In a general way, the function of the tuberculosis dispensary should be to serve as:—

- (1) Receiving house and centre of diagnosis.
- (2) Clearing house and centre for observation.
- (3) Centre for curative treatment.
- (4) Centre for the examination of "contacts."
- (5) Centre for "after-care."
- (6) Information bureau and educational centre.

#### (1) *Receiving House and Centre of Diagnosis.*

To the tuberculosis officer patients will come or be sent in every stage of illness. This means not only patients with definite tuberculosis, but patients in a delicate state of health, regarding whom there may be suspicion. As the work of the dispensary becomes better understood in any area, it will be found that persons will come or be sent to it with comparatively slight symptoms in order to ascertain whether or not they are tuberculous. In this way, the possibility of early detection is much increased.

#### (2) *Clearing House and Centre for Observation.*

When the diagnosis has been made the tuberculosis dispensary should serve as a "clearing house" through which persons suffering from the various types of tuberculosis should be passed, whatever the form of the disease and whatever the authority or person responsible for meeting the expense of the treatment. These persons will be classified by the tuberculosis officer connected with the dispensary, who should have some beds at his disposal for the purpose of observation, and sent on to the person or institution providing the treatment appropriate to the individual case. Thus the tuberculosis officer must necessarily be in the closest touch with the general practitioners and with the responsible officials of institutions providing treatment.

The success of the dispensary in this respect will depend largely on how far it is the effective centre of anti-tuberculosis operations and on the extent to which it is co-ordinated with the other elements in the scheme.

#### (3) *Centre of Curative Treatment.*

A large proportion of cases of pulmonary tuberculosis, and some cases of other forms of tuberculosis, can be adequately treated in the patient's own home. For many of these cases the tuberculosis dispensary will be the centre of treatment. The cases so treated will usually be persons who may safely continue at their several occupations, whether at home or elsewhere. Treatment provided by the dispensary will include not only general "sanatorium treatment," whether in a patient's home or in a shelter, but also more special methods of sanatorium treatment, for example, treatment by tuberculin. Those cases in which home treatment does not yield satisfactory results will need to be reclassified and drafted to the appropriate institution.

Reference may here not inappropriately be made to the importance of having the teeth and mouths of patients in a satisfactory condition. The Committee are of opinion, that it will be advisable to make arrangements with dental practitioners for providing treatment for certain cases.



(4) *Centre for Examination of "Contacts."*

The information coming to the dispensary may lead to the discovery of tuberculosis in persons living in close contact with those suffering from the disease. This possibility of discovery of other cases is a very valuable part of the machinery of control and prevention, as it leads to the detection of a large number of cases (otherwise neglected) at such an early stage of the disease that suitable treatment may readily and successfully be applied. The cases thus discovered should be classified, and distributed from the "clearing house" as already detailed.

Where clinical examination in the home results in the discovery of insanitary conditions of environment, the information obtained will be referred to the appropriate department of the sanitary authority.

(5) *After-care.*

The dispensary should likewise be of considerable service in relation to patients who have been under treatment at home or for varying periods at a sanatorium or other institution, and for whom "after-care" is desirable. For this purpose, patients, on discharge from the several institutions, should be referred again to the dispensary, which, in conjunction with the general medical practitioners and voluntary care committees, should secure such medical supervision as may be necessary to ensure that the benefit obtained from institutional treatment should be as permanent as possible.

The importance of after-care cannot be exaggerated. Unless after-care is efficient and systematic, cases of relapse will be more frequent, with the result that large and unnecessary calls will be made on the funds available. After-care should be undertaken with discretion, and should, so far as possible, avoid publicity until the prejudice against discharged patients created by the exaggerated view taken by the public of their infectivity has been overcome.

It may be advisable at some time to establish machinery whereby suitable employment might be provided for selected cases after discharge from treatment, for whom an immediate return to their previous occupation might involve risk of relapse and consequent economic waste. The Committee hope to refer to this matter in the Final Report.

(6) *Centre of Information and Education.*

The tuberculosis dispensary should constitute a centre towards which persons interested may turn for information and guidance. In course of time, by careful records on the case sheets and schedules, the accumulation of clinical facts and statistics at the tuberculosis dispensary should prove of great service in investigation connected with tuberculosis. These facts and statistics, which should be collected upon a uniform system, and should be related to the information obtained by the Medical Officer of Health in connection with the compulsory notification of all cases of pulmonary tuberculosis and in connection with the general death and sickness reports of the community, should also be at the service of those who are engaged in research, and should be of considerable value as *data* in that connection. The information so obtained, together with the systematic training of individual patients in the measures necessary for their own treatment, should materially assist in the education of the community generally, and thus serve to promote the prevention of the disease.

In addition, the dispensary should become a valuable centre of medical education. This should prove of importance in the special training of medical practitioners and nurses.

## CONSTITUTION OF THE TUBERCULOSIS DISPENSARY.

19. In making the observations which follow as to the constitution of the dispensary, the Committee do not wish to be understood to be laying down hard-and-fast lines. It should be borne in mind that the one essential is a skilled tuberculosis officer with capacity for organisation. The Committee recognise that in many instances the local conditions will render the accommodation described unnecessary.



### *Urban Dispensaries.*

#### *Accommodation.*

In most instances it will probably be found that existing buildings can readily be adapted for the purpose of a dispensary; in other cases it may be necessary to build a dispensary; or, again, it may be convenient that the dispensary should form a department of an existing hospital or infirmary. In a few large centres, more especially in centres where medical training is given, it may be advisable to have a special building on a larger scale. The dispensaries should be easy of access to the working-class population. In some of the largest cities, especially in those in which the districts occupied by the working-classes are widely separated from one another, it will be desirable to establish one or more sub-centres as branch dispensaries.

The Committee wish to express the opinion that there is no danger of infection being conveyed from the dispensaries to the occupants of neighbouring houses.

The following accommodation is generally desirable: an office, general waiting-room, committee-room, consulting-rooms (one or more) and dressing-rooms. There should also be facilities for laryngoscopical and bacteriological examination and for the provision of drugs.

#### *Cost.*

*Capital.*—The capital outlay will vary according to the type of building selected. The adaptation and equipment of an existing house should not cost more than 250*l.*, and often might cost considerably less than this sum. When a building has to be erected the cost will, of course, be much greater.

*Staff.*—The following staff would generally be required; Medical, Nursing, Secretarial, Dispensing.

*Medical.*—This will include a whole-time Chief Tuberculosis Officer, responsible for the general conduct and administration of the dispensary. He should be a first-class clinician, with special training in tuberculosis. The duties and relationships of this officer are described in section 27. Associated with him, when necessary, should be one or more whole-time assistant tuberculosis officers, according to the size of the area served by the dispensary.

*Nursing.*—There should be nurses on the staff of the dispensary. It is an advantage that these nurses should have had special training in tuberculosis work. Well-trained nurses help very much in the education of patients in the principles of sanatorium treatment, and by their periodic visits assist both the tuberculosis officers and the general practitioners in supervising home treatment.

District and other voluntary nursing associations might be utilised.

*Clerical.*—A clerk, qualified in shorthand and typewriting, to attend to correspondence and statistical records, will be found advantageous.

*Dispensing.*—In the larger centres, the services of a whole or part time dispenser will be needed. Where there are several sub-centres, one dispenser may have charge of the drug department at each of these branches. In many cases it may be possible to combine the offices of clerk and dispenser in one individual. Again, it may often be found better and more economical to make arrangements with local chemists for the necessary dispensing.

*Maintenance.*—The salaries should be such as to secure men of the requisite ability. In order to attract the right type of men as chief tuberculosis officers, it will usually be found necessary to offer a salary of not less than 500*l.* with prospects of increase. The salaries of the rest of the staff will depend on local circumstances. In addition to salaries, some of the chief items of expenditure will be rent, rates, taxes, &c., drugs, including tuberculin, stationery, &c.

### *Rural Dispensaries.*

The problem presented by the rural districts is very different from that of the urban centres.

In some rural districts branch dispensaries, with a simpler equipment, closely linked with a central dispensary, might be established in one or more of the principal small towns of the area. Local sub-centres should also be established, to



which the tuberculosis officer and nurse of the dispensary should make periodical visits. These sub-centres should be placed in small towns or large villages, and efforts should be made, by attendance on stated days, to get into touch with as large a number of persons as possible. In other rural neighbourhoods no accommodation will be found necessary, as the tuberculosis officer will himself call upon patients in their own homes.

#### *Cost.*

*Capital.*—As previously stated, most rural areas will probably be served by a main dispensary, situated in the most convenient available town, associated with branch dispensaries in different parts of the area. The capital outlay required for the main dispensary will be similar to that required for the establishment of urban dispensaries, the necessary accommodation being the same in both cases. A very small sum should be required for the establishment and equipment of each branch dispensary. The sputum examinations of patients attending the branch dispensaries will generally be made at the main dispensary. In most rural areas there will be need for several branch dispensaries, but it would seem that an additional sum of 100*l.* should be sufficient for each rural area, for capital outlay, on this head.

*Maintenance.*—The salaries and cost of maintenance of a rural dispensary unit, with its branches, appears to be very similar to the cost of maintenance of an urban dispensary. The additional expenditure on each sub-centre should be quite a small sum, the chief items being the travelling expenses of the visiting staff from the main dispensary.

#### *Care Committees.*

The effectiveness of the work of the dispensary can be greatly increased by the organisation of voluntary care committees formed of representatives from the Local Authorities, Boards of Guardians, Insurance Committees and from all charitable and social work organisations in the district. In this way all available agencies can be linked up and any extra assistance—such as additional food, change of air, clothing, better home conditions, more suitable occupation, &c. that may be needed to enable patients to benefit to the fullest extent from the treatment provided—may often be readily secured. The secretary of the care committee may conveniently be a member of the dispensary staff, and it is desirable that the chief tuberculosis officer of the dispensary should attend the meetings of the committee, to advise its members as to the particular form of assistance necessary for each individual patient. In connection with this part of dispensary work in rural districts it may be found of assistance, where the patients are willing, to have a system of voluntary correspondents who report from time to time with regard to patients in the several districts served by the dispensary.

20. On reviewing as a whole the foregoing description of the proposed constitution and working of the tuberculosis dispensary and its position in the general scheme of provision for the treatment of tuberculosis, the Committee desire to emphasize again the fact that the "dispensary" as herein contemplated is essentially not a building but an organism. The Committee have advisedly so framed their suggestions under this head as to be capable of the widest application to the varying local conditions to which it will be necessary to have regard. The essential element which must always be present is the chief tuberculosis officer, appointed by the local authority, standing in such relation to the Medical Officer of Health and the general scheme of public health administration as may be defined by the regulations of the local authority, acting as expert adviser to the local authority and Insurance Committee in matters of diagnosis and treatment, controlling, supervising or acting in consultation with, as circumstances may determine, the whole time subordinate medical officers and private medical practitioners by whom treatment is given, and himself treating cases for which special skill and experience are required.

#### NUMBER OF TUBERCULOSIS DISPENSARIES REQUIRED.

21. The Committee are of opinion, without committing themselves too definitely to a figure, that one tuberculosis dispensary will be required in the immediate future for every 150,000 to 200,000, or even more, of the population in an urban neighbourhood. In rural neighbourhoods where the population is scattered it could usually only serve a smaller number. Much will, however, depend upon the character of the neighbourhood. The Committee consider that, so far as possible, centralisation of effort should be aimed at.



## SECOND UNIT OF THE SCHEME.

*Sanatoria, Hospitals, and other Institutions.*

22. A large proportion of cases, both of pulmonary and non-pulmonary tuberculosis, require treatment for a longer or shorter period in an institution.

A certain proportion of the cases in which the working capacity is likely to be restored require treatment in a sanatorium.

Hospital accommodation is required for a large number of persons: (a) for treatment and education; (b) in emergencies; (c) in acute disease for the purposes of observation until the character of treatment required can be ascertained; and (d) for patients with advanced disease not able to be nursed at home, under conditions that will ensure the patient's comfort and the safety of those about them.

Patients will be transferred to this second unit from the tuberculosis dispensary in its capacity of a clearing-house. The Committee will deal more fully with the various questions as to the character of the accommodation required and other particulars in their Final Report, but wish to draw attention now to certain matters of immediate importance.

## SANATORIA.

23. The general question of sanatoria, including construction, will be dealt with more fully in the Final Report. The buildings should consist of (1) the sanatorium proper; (2) a hospital section for cases with acute symptoms (say 20 per cent. of the beds); (3) an administrative block. The buildings should be built with a view to expansion and should be so arranged that treatment can be provided for both men and women. It is desirable that distinct institutions, or at least separate pavilions, should be provided for children.

*The Size of Individual Institutions.*

It is difficult to fix a maximum number of beds, but, other things being equal, the larger institutions have obvious economic advantages. It is strongly recommended that an individual sanatorium should contain not less than 100 beds.

*Capital and Maintenance Cost.*

The capital cost must vary with the number of beds, the cost of land, the material used, and local conditions. It should probably not, as a rule, exceed 150*l.* a bed, inclusive of cost of site and equipment. The cost of maintenance per bed will probably be from 25*s.* to 30*s.* a week.

*Site.*

Treatment can be and has been carried out satisfactorily in sanatoria situated close to large cities, but such a situation tends to increase the cost of the site. A more isolated position is usually advisable. Speaking generally, a sanatorium should be on a somewhat elevated and sloping site, well sheltered from the prevailing winds, with a sunny exposure, a dry and permeable soil, an abundant water supply, and facilities for drainage. A low rainfall is desirable where practicable. For convenience of transport, haulage and accessibility, the sanatorium should be within a convenient distance of the railway station.

The extent of the site should be sufficiently large to allow facilities to be provided for graduated work, the erection of workshops, the making of a kitchen garden, farm, &c. Half an acre per patient is a fair allowance, but less may suffice.

*Medical Staff.*

In addition to a medical superintendent, there should be two resident medical officers for an institution of 200 beds and one resident medical officer for an institution of 100 beds. The salaries should be such as to secure men possessing the requisite ability. It must be remembered that the proper performance of their duties requires high and varied qualifications, and the Committee are of opinion that, in order to attract the right type of men as medical superintendents, it will usually be found



necessary to offer a salary of not less than 500*l.* a year with house, and with prospects of increase.

At the present time, owing to the lack of facilities for obtaining experience in the institutional treatment of tuberculosis, there are comparatively few medical men and nurses who possess the necessary qualifications for posts in sanatoria. If a number of sanatoria are to be established, this deficiency must be borne in mind. It will take some months to give medical men and nurses the necessary training. A certain number of appointments should therefore be made in the near future, on the understanding that those selected should at once make adequate arrangements to secure the necessary training and experience.

#### *Number of Sanatorium Beds required.*

As it is impossible to give an accurate estimate on this subject, the sanatorium accommodation to be provided now should be less than what may seem to be the probable requirements for the immediate present and for the future. Experience alone can determine what these requirements actually are and will be, and by waiting better use will be made of the available funds.

Subject to the qualifications as to figures expressed in section 41, in the opinion of the Committee it is advisable to provide in the immediate future one bed per 5,000 population in the United Kingdom.

Sanatoria should be complementary to each other in respect of the reception of patients, so that an overflow of cases from the area of one sanatorium should be received by another having vacant accommodation at the time. Arrangements to this end should be made by the Local Government Board.

#### HOSPITAL ACCOMMODATION.

24. The amount of hospital accommodation required, and to a less extent its character, must depend upon local conditions. Existing accommodation should be utilised as far as may be feasible. A certain number of Poor Law institutions might possibly be taken over and beds in isolation hospitals might be adapted and utilised for this purpose. Provided that ventilation is adequate it is not necessary to provide as large a cubic space per patient as for other infectious diseases. Where the accommodation is insufficient it is a better plan to provide the additional beds required by enlargement of existing institutions rather than by the erection of new and special buildings. The treatment of advanced cases of tuberculosis does not call for hospitals of a special type, and so far as may be possible the accommodation should be in connection with hospitals in which other diseases are treated. If this policy is adopted the danger of the treatment of tuberculosis becoming a special and separate thing will be lessened, the needs of medical education will be met to a greater extent than they are at present, and administration will be more economical. The segregation of advanced cases in institutions separate from those for other diseases is undesirable and unnecessary so long as it is possible to ensure adequate protection against the spread of infection. The accommodation made for advanced cases should be, so far as possible, in districts easy of access to the friends of the patients.

#### *Number of Hospital Beds required.*

The number of beds required is problematical, and is dealt with in section 41.

#### NON-PULMONARY TUBERCULOSIS.

25. This includes tuberculosis of the skin, glands, spine, joints, and peritoneum. Modern experience shows that treatment of these cases, in children at least, should be essentially conservative in character, and that the best results are obtained in institutions in the country. The number of beds required cannot be correctly estimated on the available data. The capital cost per bed may probably be put at 150*l.*, on an average, and the maintenance charge per bed per week at from 25*s.* to 30*s.*

The Committee do not consider it necessary to deal more fully in this Report with the question of non-pulmonary tuberculosis.



### POSITION OF EXISTING VOLUNTARY INSTITUTIONS.

26. So far as possible, existing voluntary institutions such as sanatoria, &c., should be utilised, provided that they fulfil the following conditions :—

- (1) That they be approved as suitable by the Local Government Board.
- (2) That they fall into the general scheme for the prevention and treatment of tuberculosis.
- (3) That they be subject to inspection by the Local Government Board whenever considered necessary.

### DUTIES AND QUALIFICATIONS OF HEADS OF DISPENSARIES AND SANATORIA.

27. The chief tuberculosis officer of the dispensary should be independent of control by any other medical man so far as his clinical duties are concerned, and should, subject to his relationship to other officers as defined by the local authorities' regulations, be responsible for the management of these institutions. He should be in intimate relationship not only with Medical Officers of Health, but also with the general practitioners in the locality, and the medical officers of the several institutions (sanatoria, hospitals, &c.), which constitute elements in the co-ordinated scheme. He should decide as to the suitability of patients for the sanatorium, the hospital for advanced cases, &c., in co-operation, so far as is possible, with the general practitioners and with the medical officers of these institutions. He should also be in close touch with other authorities (including those responsible for Poor Law institutions), charity organisation societies, and all agencies, voluntary or otherwise, which have an interest in tuberculous persons.

The Committee desire to lay emphasis upon the necessity of having suitably qualified and experienced medical men for the senior appointments in connection with the dispensaries and sanatoria. Indeed, the effectiveness and economy of the administration of the scheme suggested by the Committee will be dependent, in a large degree, upon the judicious selection of these officers.

With a view to securing desirable officers the Committee recommend that, in giving or withholding approval, the Local Government Board should take into consideration the whole management and staffing of these institutions (including the tenure and other conditions of appointment of the staff), not only from the point of view of the advantage to the patients concerned, but in order to command the confidence and co-operation of the medical practitioners within the area.

Whilst not desiring to lay down any hard-and-fast conditions, the Committee are of opinion that preference should be given to registered medical practitioners of suitable qualifications and experience and not less than twenty-five years of age, who have held house appointments for at least six months in a general hospital, in addition to a similar period of attendance at a special institution for the treatment of tuberculosis. They should also be competent to supervise such laboratory work as may be necessary.

### POSITION OF THE GENERAL MEDICAL PRACTITIONER.

28. The Committee are of opinion that it is of primary importance to the lasting success of any scheme for dealing with tuberculosis that it should enlist the hearty co-operation and stimulate the interest of the general medical practitioners of the country. Their intimate personal relations with patients and their influence in the homes of the people are forces which should be actively enlisted in the campaign against the disease as aids to securing its early recognition and methodical treatment, as well as in promoting the effective after-care of cases of tuberculosis and in encouraging those healthy habits of life which are so essential to building up the powers of resistance to the disease.

For these reasons the practice of the tuberculosis dispensary should be so arranged as to encourage general medical practitioners to seek the help and instruction which it affords both by consultation with its special medical officer in the homes of the patients and at the dispensary. Wherever practicable, the practitioners of an area, or some of them, should be engaged to serve as assistant medical officers to the dispensary, in rotation or by some other agreed method.



In order to secure these ends the Committee believe that, as a rule,\* the following conditions are essential:—

- (1) The chief tuberculosis officer of the dispensary should be a whole-time officer whose duties will be such as will not bring him into competition with the other medical men of the district. He should be of suitable age and attainment and enough of an expert on the subject of tuberculosis to command general confidence.
- (2) The chief tuberculosis officer of the dispensary should, wherever practicable, act as the adviser to the Insurance Committee as to the character of the treatment of cases that are recommended for sanatorium benefit. The chief tuberculosis officer of the dispensary in such cases should act in an advisory and consultative capacity, his aim being to avoid unnecessary interference and to establish such relations with the general medical practitioners that his advice and help will be gladly sought.
- (3) In the case, at all events, of insured persons, patients living at home who are treated at or under the supervision of the dispensary should generally be placed, where they are willing, under the care of some general practitioner who will carry out the necessary home treatment in consultation with the chief tuberculosis officer of the dispensary, and who will, where the patients are insured persons, be paid out of the funds available for Sanatorium Benefit.
- (4) Arrangements should be made for the provision of expert advice in surgical, dental, and in other cases where difficulties may arise.

#### CHILDREN.

##### *General.*

29. Childhood affords an excellent opportunity for detecting and dealing with tuberculosis. The more the resistant power of children is increased, the lighter will be the burden of tuberculous disease in the adults of the next generation. The factors which tend to weaken the defensive powers of children can be brought under control easily and at an early stage. Among these factors the Committee desire to lay stress on the deleterious effects of malnutrition.

It is also of great importance that adequate measures should be taken to limit infection.

##### *Institutions available and needed for England and Wales.*

30. There is a certain amount of accommodation in voluntary and other institutions already existing for cases of pulmonary tuberculosis in children and also a large number of beds for non-pulmonary tuberculosis. There are also about 180 places in open-air schools for tuberculous children and 750 places in general open-air schools. In addition there is a certain amount of miscellaneous provision in general and special hospitals.

With regard to new accommodation required, it may be convenient to consider provision for cases of—

- (a) Pulmonary tuberculosis.
- (b) Tuberculosis of the bones and joints.
- (c) Glandular and other forms of tuberculosis.

(a) Children suffering from pulmonary tuberculosis should, whenever practicable, be sent to residential sanatorium schools. The Committee are advised that some 250 additional beds for this class of case should be provided at the outset.

(b) Children affected with osseous tuberculosis should be sent to residential sanatorium schools equipped with all necessary appliances for conservative surgical treatment. At present the accommodation for these cases is very inadequate. To begin with, at least 2,000 additional beds are needed.

(c) Glandular and other forms of tuberculosis should mainly be dealt with by means of open-air schools, playground classes, night camps, &c. It is urgently necessary that accommodation of this character should be considerably extended and made available throughout the country. Such institutions should also deal with the



large number of children who are suffering as a result of conditions and from ailments which, if neglected, are likely to lead to the development of tuberculosis.

The nature of the residential institutions which should be provided should, in the main, follow the general lines, laid down in this report, for such institutions for the use of adults. The Committee consider that separate institutions or, at least, separate pavilions or departments, should be provided for children.

*Correlation of Children's Institutions with the General Scheme.*

31. Children of school age in attendance at elementary schools are under the supervision of the local education authority. They are subject to a periodical medical examination as part of the routine of their school life. It is obvious, therefore, that local education authorities have the opportunity of playing a very important and, indeed, essential part in the detection, prevention, and treatment of tuberculosis. In order to link up the local education authority with the scheme already indicated it is desirable that the school medical officer should be closely in touch with the tuberculosis dispensary. The dispensary should provide, as far as possible, the same services for children as for adults.

ADMINISTRATION IN ENGLAND AND WALES.

32. It is the opinion of the members of the Committee present and voting,\* that, with a view to securing prompt and effective concerted action and a common trend of effort, the Government departments concerned, such as the Local Government Board and the National Health Insurance Commissions, should make, as has been done by other Government departments, mutual arrangements in some convenient form whereby important questions arising under the Insurance Act affecting the administration as to tuberculosis should first be considered jointly by representatives of the departments concerned.

33. The Committee have already indicated the lines upon which, and the areas within which, the system which they recommend should be established. The question then arises as to how, and by whom, this system should be organised in order to secure (a) that every person suffering from tuberculosis, whatever the form of his disease, and whatever authority or body may be liable, or may have undertaken, to bear the cost of its treatment, should receive the treatment appropriate to his condition; and (b) that in the interests both of economy and efficiency unnecessary multiplication of offices and institutions, and overlapping and conflict of authorities, should be as far as possible avoided.

*County and County Borough Councils to be Primarily Responsible.*

34. In previous paragraphs of the Report the parts have been described which are, or may be, played in the provision of institutions (1) by various public authorities, including County Councils, County Borough Councils, and other Sanitary Authorities; and (2) by charitable and other private bodies and persons. It is clear that some public authorities, in the exercise either of powers conferred by the Insurance Act, or powers previously held, could both (a) undertake the independent provision of necessary institutions of all kinds, and (b) themselves defray the entire cost of maintenance and treatment in such institutions of persons resident within their respective areas who were suffering from tuberculosis in any form. An authority, whether a County Council, a County Borough Council or a local Sanitary Authority might thus provide separate institutions under its own sole control for the treatment of persons, the cost of whose maintenance and treatment therein, it entirely defrayed. If, however, a policy of independent provision of this kind were widely pursued, it would obviously result in unnecessary multiplication of institutions, many of which would be too small for economical and efficient management. Some combination of authorities for the purpose is, therefore, clearly desirable, and is specifically provided for in the Insurance Act.

Having regard to the different classes of institutions which are required, to the variety of the cases to be dealt with, and to the proper organisation of comprehensive efficient and economical schemes, the Committee are of opinion that the unit area should generally be that of the County, County Borough, or in some cases a group of

\* Mr. Astor in his capacity as Chairman, Mr. Willis, Dr. Newsholme, Dr. Leslie Mackenzie, Dr. McVail, Dr. Smith Whitaker, Dr. Niven, and Mr. Stafford abstained from voting. Sir George Newman and Dr. Meredith Richards were absent.



Counties and County Boroughs, and that the organisation of schemes will best be carried out if undertaken by the County or County Borough Council or in cases of combinations by a Joint Committee of these bodies (or possibly of one or more of such bodies with other local authorities). While the Council or Joint Committee should be the body legally responsible for the provision and maintenance of the institutions required, the Committee consider that in formulating a complete scheme for an area, they should consult in reference thereto the other Sanitary Authorities and also the Insurance Committees which are interested. The Committee are of opinion that these bodies, recognising the services that have been rendered in the past by voluntary effort should encourage the continuance of such services by making the utmost use of the provision which private liberality has made available. Every endeavour should be made to include in the local scheme institutions and associations which are carried on by private effort.

As regards London, it seems desirable to the Committee that it should be considered whether some of the sanatoria and hospitals required should not be provided by the Metropolitan Asylums Board, and whether dispensaries should not be provided by the Metropolitan Borough Councils.

*Relation of Sanitary Authorities other than County Boroughs to the Scheme.*

35. Sanitary authorities are the bodies primarily concerned in the administration of the public health laws of this country, and they must occupy an important position in any general scheme dealing with tuberculosis.

It is they who receive notifications of cases of pulmonary tuberculosis, and it is the duty of their medical officers of health, on receiving notifications, to take such steps as may appear to them to be necessary or desirable for preventing the spread of infection and for removing conditions favourable to infection.

Some sanitary authorities have already provided beds or hospitals which are being utilised as sanatoria for consumptives, and in this and in many other ways these bodies are actively engaged in assisting in the control of tuberculosis.

It is, therefore, clearly desirable that the schemes which are to be organised by county councils should be so framed as to secure the co-operation of sanitary authorities to the fullest extent.

It is not possible to lay down in precise detail how such co-operation should be secured. The circumstances of different counties vary, and the formulation of particular schemes must take account of such variation. But it will probably be found expedient, when any of the larger sanitary authorities are already providing or are prepared to provide any of the institutions or other parts of the contemplated machinery, that those authorities should be given due place in the committee controlling or advising the arrangements.

As a general rule the formulation of a county scheme will rest, in the first instance, with the county medical officer of health, and he will no doubt ascertain what are the needs of the county, and what existing arrangements, whether those of sanitary authorities or the voluntary organisations, can properly be incorporated in the scheme.

The Committee are inclined to think that, subject to proper arrangements being made with such sanitary authorities as are prepared to carry out, as above indicated, any portion of the scheme, it will generally be desirable that the County Council should be responsible for the provision and maintenance of institutions, including tuberculosis dispensaries, and that any accommodation which is provided by other authorities, and which is utilised as part of the county scheme, should be so utilised under the responsibility and direction of the County Council.

One distinct advantage from the use of the county rate would be that so much of the expenditure as was thus met could be made to fall equally over the whole county.

*Relation of Insurance Committees to the Scheme.*

36. Insurance Committees will have the following duties:—

- (a) That of securing prompt official notice whenever suspicion arises that an insured person (or possibly a dependent) is suffering from tuberculosis.
- (b) That of obtaining proper evidence as to whether such person is in fact suffering from tuberculosis.
- (c) That of deciding whether such person, if found to be suffering from tuberculosis, shall receive "sanatorium benefit."



- (d) If it be decided that he shall receive "sanatorium benefit," that of deciding what form of treatment he shall receive, and with what person or authority the Committee shall make arrangements with a view to his receiving suitable treatment, and of making the necessary arrangements.

The duties of the Committee under (a) and (b) are chiefly medical, and must be discharged by making suitable arrangements with medical practitioners for reporting cases to the Committee, and for making the confirmatory diagnosis when required.

The duties under (c) involve both medical and financial considerations. If the necessary funds are available the Committee may be able to act upon the principle that all cases of tuberculosis occurring in insured persons shall receive "sanatorium benefit." If the funds are insufficient for this, some discrimination must be made, and such discrimination must be based chiefly upon medical grounds. In other words, the Committee must be advised by a medical expert in its exercise of this discrimination.

The Committee must also act under medical advice in deciding to what kind of institution, if any, a given patient should be referred, or whether he should be treated in a dispensary or at home.

When a Council has established a scheme in full working order, a large proportion of the patients to be treated by and in the institutions it has established will consist of persons referred to it by the Insurance Committee, for the cost of whose treatment that Committee is responsible.

When an Insurance Committee is performing its duties under the Insurance Act it will look mainly to the county or county borough scheme for the provision of institutional and dispensary treatment for those whom it recommends for sanatorium benefit.

37. The Committee are of opinion that the point of contact between the two bodies should be the tuberculosis dispensary. The chief tuberculosis officer of the dispensary would seem to be the person best qualified to advise Insurance Committees in the discharge of such of their duties relating to persons suffering from tuberculosis as involve medical considerations. When institutional treatment is necessary he would be able to take or advise the right steps, since he would be in close touch with the available institutions in the County scheme; where treatment other than in an institution is necessary, he would be able to assist in giving it efficaciously through the dispensary.

The Committee recognise that the disposition of Insurance Committees to make full use of the medical staff of the dispensary in the manner which is above indicated may be largely dependent upon some measure of control being given to them over the personnel and working of the dispensary.

It appears to the Committee, however, that satisfactory arrangements for the combined use and control of the dispensary might well be made by arrangement between the two parties concerned.

The Committee are of opinion that, for the reasons above stated, the bodies legally responsible for the establishment and maintenance of the tuberculosis dispensary should be the Councils, but they suggest that arrangements should be made whereby, in view of the payments that would be made by Insurance Committees (under agreements for a term of years) towards the expenses incurred in connection with the dispensary in respect of the Committees' patients, the Councils might agree to be guided, in matters appertaining to the staffing and internal management of the dispensary, by the advice of a consultative committee consisting of members of the two bodies appointed by the respective parties in some agreed proportion.

Voluntary bodies of an approved character specially interested in tuberculosis might suitably be given representation on this consultative committee.

#### WALES.

38. The position of Wales differs from that obtaining in England in the following respects:—

Section 82 (3) of the National Insurance Act enacts that the power of the Local Government Board with respect to the distribution of any sum available for the purpose of the provision of or making grants in aid to sanatoria and other institutions shall, as respects the part thereof apportioned to Wales, be exercised by the Welsh Insurance Commissioners. Section 77 (3) also gives the Welsh Insurance Commissioners power



to inspect institutions towards which grants have been made. Section 82 (4) of the Insurance Act requires the Welsh Insurance Commissioners in making, and the Treasury in approving, grants in aid of providing sanatoria and other institutions to have regard to the provision of such institutions which may have been made or may be proposed to be made by any association established for Wales by Royal Charter before or within 12 months after the commencement of this Act. The King Edward VII. Welsh National Memorial Association, which has a fund exceeding 200,000*l.* at its disposal, has recently taken the necessary steps to obtain a Charter.

The constitution of this Association provides for the representation of every County and County Borough Council, and Insurance Committee in Wales and Monmouthshire. It is, therefore, a national institution, and aims at placing the campaign upon a national basis. The Committee consider, therefore, that all the recommendations contained in sections 20 and 33 to 37 of this report need not apply in the case of Wales.

Furthermore, the Welsh problem presents certain special difficulties. Many of the counties are entirely rural, sparsely populated, and difficult of access from any one centre. Thus, no less than six of the thirteen counties have less than 60,000 population, while even in Glamorganshire, which contains nearly half the population of Wales, special difficulties arise from the physiographical features of the district. At the same time, it is precisely in some of the sparsely-populated areas that the need for activity in respect to the prevention and treatment of tuberculosis is most acute. For these reasons Wales is fortunate in having the National Memorial Fund available for supplementing either capital expenditure or revenue derived from other sources.

The Committee desire to point out that in any national scheme for Wales particular attention should be paid to the training of county and district nurses in the treatment of tuberculosis and in securing the co-operation of existing nursing associations.

#### SCOTLAND.

39. The Committee consider that certain of their recommendations may not be applicable or suited to Scotland owing to the different position (legal and otherwise) existing in that country. In the following statement it is shown how, by the exercise of the powers of the Public Health Acts and of the National Insurance Act, it is practicable in Scotland: (a) To make extensive use of existing authorities; (b) To correlate the activities of public health authorities and insurance committees; (c) To provide a method whereby the central authorities may work in perfect co-ordination in the execution of their respective statutory duties; (d) To arrange that voluntary institutions, whether sanatoria, hospitals, dispensaries, or colonies, can, without undue sacrifice of autonomy, form an effective part of the official administration.

#### *Legal Powers of Local Authorities.*

The local authorities for the administration of the Public Health Acts in Scotland are:—

- (a) For burghs—the town council.
- (b) For counties divided into districts—the district committee.
- (c) For counties not divided into districts—the county council.

The district committee is composed partly of county councillors and partly of members representing the Poor Law Authority (parish council). The county council controls the finance of the district Committee.

The central authority is the Local Government Board for Scotland.

The principal Public Health Acts are (a) the Public Health (Scotland) Act, 1897; (b) the Infectious Disease (Notification) Act, 1889.

#### 1. *Notification.*

(a) Pulmonary Tuberculosis is an infectious disease within the meaning of the Public Health (Scotland) Act, 1897.

(b) Accordingly, any local authority may do in respect of pulmonary tuberculosis whatever it is entitled to do for any ordinary infectious disease, e.g., enteric fever.

(c) In addition to the usual methods of obtaining information, the local authority may extend the Notification Act of 1889 to pulmonary tuberculosis.



(d) This extension has been made by local authorities representing over 60 per cent. of the population of Scotland.

(e) Whether the disease is compulsorily notifiable in any district or not, the local authority is entitled and obliged to apply the Public Health Act to pulmonary tuberculosis.

## 2. Powers of Enquiry.

(a) The medical officer of health may "enter and inspect any house . . . in which he has reason to believe that any infectious disease exists or has recently existed." This enables him to deal with all insanitary conditions of housing, *e.g.*, overcrowding, dampness, darkness, &c.

(b) He "may examine any person found on such premises with a view to ascertaining whether such person is suffering or has recently suffered from any infectious disease." This authorises him to examine both actual patients and "contacts."

(c) These powers cover everything necessary for the full personal and environmental investigation of cases of pulmonary tuberculosis.

(d) There are in the Act full powers of dealing with any insanitary conditions discovered.

## 3. Disinfection and Cleansing.

The local authority may, and when required by the Local Government Board, shall provide means for disinfecting clothing, bedding, &c., and has full powers itself, at its own expense, to disinfect and cleanse houses and clothing, or to require the householder to do so. These powers are very fully exercised.

## 4. Removal to Hospital.

Any person suffering from an infectious disease who is (1) without proper lodging or accommodation; (2) lodged where precautions cannot be taken against the spread of the disease; (3) lodged in a tent or van; (4) lodged in a room occupied by others; (5) on board ship, may be removed to a hospital at the instance and cost of the local authority, on medical certificate by order of a sheriff, magistrate, or justice.

Instead of ordering the removal of a patient, the sheriff or magistrate may order removal of other inmates to houses provided by the local authority. These powers are applicable to pulmonary tuberculosis; but, meanwhile, more patients ask for admission than the existing institutions can accommodate, and the exercise of the powers has been practically unnecessary. There is power in a proper case to detain a patient in hospital.

## 5. School Clause.

No infected child may be sent or admitted to school, and no child from an infected house can be sent or admitted to school, unless the medical officer or medical attendant certifies that "proper precautions" against the spread of infection have been taken, and that the child can attend school without risk.

Medical inspection of school children is now established all over Scotland.

## 6. Infected Persons carrying on Business.

There are sections giving powers to control infected persons in the exercise of business—*e.g.*, milking of animals, and other occupations connected with food—but these are too well known to need summarising.

## 7. Hospitals (including Sanatoria), Convalescent Homes, Reception Houses.

(a) Any local authority may, and, if required by the Board, shall, provide, furnish, and maintain for the use of inhabitants of their districts suffering from infectious disease, hospitals, temporary or permanent, and houses of reception for convalescents from infectious diseases, or for persons who have been exposed to infection.

(b) Thus the Board may require local authorities to provide: (1) hospitals, temporary or permanent, including sanatoria, shelters, and any other form of hospital; (2) houses for convalescents; (3) houses of reception for contacts.

(c) These powers cover every variety of house or hospital for the isolation and treatment of tuberculosis—*e.g.*, sanatorium, isolation hospital, tents, shelters, open-air schools, holiday homes, colonies, day camps, night camps, &c.



(d) Such institutions are "for the use of inhabitants of their district."

(e) In order to realise these powers, the local authorities may: (1) themselves build hospitals or houses; (2) contract for the use of such hospital or house or part thereof; (3) enter into agreement with any person having the management of the same. This covers all ordinary methods of providing hospitals or convalescent houses or reception houses. But there is a further power: (4) The local authority may, with the consent of the board, also, or in place of, providing such hospitals or houses, (a) employ nurses to attend persons in their own houses, (b) supply medicines, (c) supply medical attendance. This covers all that is involved either in dispensary or in domiciliary treatment; (5) the local authority may also "provide and maintain one or more portable hospitals for the use of their districts." This includes portable shelters.

(f) Two or more local authorities may combine for all these purposes, and, if required by the Board, they must combine. Failing agreement, the Board can fix terms, and their determination is final. The site and plans of all such hospitals or houses must be approved by the Board. The site may be within the district or within a convenient distance of the district. No contract for the use of a hospital or house can be entered into by the local authority without the sanction of the Board.

The above powers enable the Local Government Board for Scotland to require local authorities to provide out of rates for practically every variety of treatment included under the term "sanatorium benefit." With special reference to tuberculosis, the powers of the Public Health Acts are supported and extended by the provisions of the National Insurance Act, sections 16, 17 and 64, and the additional funds made available will facilitate the extension of the activities of the public health authorities both of town and county.

In a circular issued in 1906, on the Administrative Control of Pulmonary Tuberculosis, the Board expounded fully the obligations of local authorities and the various methods of developing, in a comprehensive scheme, their powers of prevention and treatment, including the provision of dispensaries in populous places, sanatoria, hospitals, day-camps, night-camps, health-colonies, &c. The response to the suggestions made in that and in subsequent circulars has been very wide-spread, and the official interest in tuberculosis all over Scotland has attained to a very high level.

To voluntary effort, both in town and country, has been due a great deal of valuable work in the prevention and treatment of tuberculosis. The Committee desire to express their great appreciation of this work and their hope that it may all be duly correlated with the scheme recommended.

In view of this recital of fact and law, it is obvious that the problem in Scotland has important aspects of its own. The Committee do not propose to enter into details as to arrangements to be made or measures taken or to be taken by the Scottish central and local authorities. The Committee, however, desire to recommend that the establishment of the two main units, viz. (1) Dispensaries (including domiciliary treatment), and (2) Sanatoria, &c., should continue to be the basis of action in Scotland on the same main lines as in the other three countries. They desire further to indicate that the Highlands and islands raise, however, exceptionally difficult administrative and financial questions which it is not within the scope of this report to discuss in detail.

## IRELAND.

### *Powers of Local Authorities.*

40. With regard to the legal powers of local authorities to provide sanatoria, hospitals, and dispensaries, the following provisions are in force in Ireland:—

Section 155 of the Public Health (Ireland) Act, 1878, and section 4 of the Tuberculosis Prevention (Ireland) Act, 1908. Section 155 of the Act of 1878 is as follows:—"Any sanitary authority may, with the sanction of the Local Government Board, provide for the use of the inhabitants of its district hospitals or temporary places for the reception of the sick or convalescent, and for that purpose may itself build such hospitals or places of reception, or contract for the use of any existing hospital, or part of a hospital, or place for the reception of the sick or convalescent, or may enter into an agreement with any person or body of persons, having the management of any hospital for the reception of the sick or convalescent inhabitants of the district, on payment of such annual or other sum as may be agreed upon."



Part I. of the Tuberculosis (Ireland) Act provides, where adopted, for the notification of certain forms of tuberculosis. Part II., section 4, of the same Act enacts that:— (1) A county council may, if they think fit, provide hospitals and dispensaries for the treatment of inhabitants of their county suffering from tuberculosis, and for that purpose may—(a) themselves establish and maintain such hospitals and dispensaries, or (b) enter into an agreement with any person having the management of any hospital or dispensary for the reception, maintenance, and treatment in the hospital, or for treatment in the dispensary, as the case may be, of any such inhabitants of their county, as aforesaid. (2) Two or more county councils may combine in providing a common hospital or dispensary for the purpose of this section.

#### *Present Position.*

With the exception of the beds provided by boards of guardians, very little provision has been made by local sanitary authorities for the treatment of tuberculosis, and no dispensaries or sanatoria have been provided by county councils under the Tuberculosis Act, 1908. A certain number of beds have been provided, and one dispensary through the enterprise of the Women's National Health Association, and a few hospitals for the treatment of early cases have also been provided by voluntary effort. Altogether the provision available in institutions outside the poor law for the treatment of cases of tuberculosis is extremely small, having regard to the large death-rate from the disease. The Committee desire to express their appreciation of the work done in Ireland by the Women's National Health Association. They are of opinion that every effort should be made to assist and develop the work of the Association.

#### *Ireland as compared with Great Britain.*

The conditions in Ireland are very different from those in England. For instance, the Irish population is largely rural, whilst the English is largely urban. The number of deaths from tuberculosis per 1,000 of the Irish population is much higher than in the rest of the United Kingdom. The law, in many respects, is different. In Ireland the county councils have no public health functions, and there are no county medical officers of health; the notification of tuberculosis is not universally adopted. The schools are not rate-aided, and there is no system of medical inspection or treatment of school children.

The infectious disease hospitals are, for the most part, in the hands of the poor law boards.

#### *Recommendations for Ireland.*

It is clear that some of the recommendations which the Committee have made in the other section of the report would either not be applicable to Ireland, or might require to be considerably modified. In view, therefore, of the more complex conditions existing in Ireland, the Committee desires merely to express the opinion that the same general principles as regards treatment and the class of institution to be established which are indicated in this report are applicable to Ireland, and that the authorities administering the grants should, in the main, be guided by those general principles.

The areas of administration should, as far as practicable, be those of borough and county councils or combination of counties.

The Committee consider that it is necessary, in order to deal effectively with tuberculosis in Ireland, to provide without delay for:—

- (a) The compulsory notification of pulmonary tuberculosis in all districts in Ireland.
- (b) Entrusting county councils with administrative functions for dealing with public health and for the appointment of county medical officers of health.
- (c) The medical inspection and treatment of school children, which should be provided by means of a Government grant.

The Committee consider that a fixed proportion of the grant of 145,000*l.* to Ireland should be earmarked for providing for the institutional treatment of tuberculous children. The higher incidence of tuberculosis in Ireland amongst children of the school age renders it imperative that adequate provision should be made for dealing with this aspect of the question, for if this matter is not adequately dealt with, it may result in throwing upon the insured ages a large number of medically unfit persons, and thus upset the actuarial calculations upon which the finance of the National Insurance Act is founded.



The Committee are also of opinion that, so far as it may be found practicable, aid from the grant may be afforded to those voluntary institutions which are found to be doing good work in the treatment and prevention of tuberculosis, and which are willing to provide further accommodation for the treatment of tuberculous patients.

#### FINANCE FOR THE UNITED KINGDOM.

41. In dealing with the question of finance in relation to the provision of new and additional accommodation, the Committee desire to state that any figures which are given in this Report must be taken to be extremely tentative and provisional.

The extent to which new and additional accommodation will be required depends upon a number of factors which it has not been possible for the Committee to ascertain with any degree of accuracy. Among these factors are (1) the extent to which existing accommodation is, or may become, available to meet future requirements; (2) the probable number of patients in the different stages of the disease; (3) the degree to which these patients will respond to treatment; (4) the extent to which insurance committees and other bodies may decide or be advised to give institutional as distinguished from other forms of treatment. It has not as yet been found possible to ascertain the first of these factors, nor do the Committee feel in a position to make a reliable forecast as to the remaining three.

The Committee, however, anticipate that, before distributing the capital sum made available by the Finance Act, 1911, and before approving schemes in local areas, the Local Government Board will take such steps as may be necessary to collect information as to existing accommodation.

#### *Tuberculosis Dispensaries.*

Subject to the considerations set forth in section 21 of this report, some 225 to 300 (dispensaries or their equivalent staff) will probably be required for the United Kingdom. Allowance must, however, be made for sparsely populated areas for which other and special arrangements may be needed.

As stated earlier, an existing building should, as a general rule, be adapted for a dispensary, and the Committee think that from 250*l.* to 350*l.* should suffice to cover the capital expenditure for the alteration and equipment necessary.

#### *Sanatoria for Adults.*

On the basis of the provision of one bed for every 5,000 inhabitants, some 9,000 beds will be necessary at the outset for the United Kingdom, including such existing sanatorium beds as may be suitable and available.

The cost of the additional accommodation necessary may probably be estimated at 150*l.* per bed, on an average, including the cost of the land and of the administrative section.

#### *Hospital Beds.*

The Committee cannot at present suggest any figures under this head beyond making a rough estimate that, in addition to Poor Law beds, some 9,000 beds would seem to be required for the purposes of observation, treatment, education and isolation.

How many of these 9,000 beds will require to be provided depends upon the number of available beds already in existence which are not now being utilised for the treatment of tuberculosis.

#### *Beds for Non-pulmonary forms of Tuberculosis.*

The Committee propose to deal with non-pulmonary tuberculosis in the Final Report.

#### *Children.*

The Committee, realizing the importance of undertaking the systematic treatment of children, propose to recommend in the Final Report that a definite sum should be allocated for the provision of the necessary institutions.



## FINANCIAL RECOMMENDATIONS.

*Capital.*

1. That, with a view to encouraging the early provision and equipment of tuberculosis dispensaries, capital grants should be made up to four-fifths of the amount required, provided that this sum should, generally, not exceed 1*l.* per 750 population, or an average of 240*l.* per dispensary.

2. That, for the provision of the additional sanatorium beds for adults required at the outset, capital grants should be made up to three-fifths of the cost per bed, provided that the total sum does not exceed an average of 90*l.* per bed.

3. That grants should be made for beds other than sanatorium beds. Owing to the lack of information at present at their disposal, the Committee cannot in this Report suggest what amount of capital outlay for these beds should be provided out of the Parliamentary grant. They can only recommend that in the making of these grants the same general principles should be observed as in the case of sanatorium beds.

*Maintenance.*

(1) That Insurance Committees when they are formed should make agreements with the governing bodies of sanatoria, hospitals, etc., for the maintenance of a fixed number of beds for a term of years.

(2) That the payment of Insurance Committees to the governing body of the dispensary, in consideration of the treatment of patients for whom the Committees are responsible, should take the form of a lump sum paid annually under an agreement for a term of years. In cases in which, under such agreement, the medical staff at the dispensary act as advisers of the Insurance Committee in questions of diagnosis and recommendation for treatment, an additional annual payment should be made in consideration of such services.

(3) That the payment to general practitioners treating persons under the scheme in consultation with the chief tuberculosis officers of the dispensaries should be on a scale agreed upon between the parties concerned, and that in respect of insured persons this payment should be in addition to the sums paid for medical benefit.

## SUMMARY OF PRINCIPAL RECOMMENDATIONS.

42.—(1) That schemes dealing with the whole population should be drawn up by councils of counties and county boroughs\* or by combinations of these bodies at the earliest possible date on the lines recommended in this report, with due regard to the incidence of the disease and the special conditions and circumstances of the area.†

(2) That the early establishment in working order of an adequate number of tuberculosis dispensaries is essential.

(3) That, so far as possible, grants in aid of tuberculosis dispensaries should only be given where such institutions will eventually form constituent parts of complete schemes.

(4) That, in framing complete schemes, regard should be had to all the existing available authorities, organisations, and institutions with a view to avoiding waste by overlapping and to obtaining their co-operation and inclusion within the schemes proposed.

(5) That special regard should be given to securing the co-operation of medical practitioners in the working of the schemes, particularly in relation to the early detection of the disease and its domiciliary and dispensary treatment.

(6) That special attention should be paid to securing suitably qualified and experienced medical practitioners for the senior appointments in connection with institutions established, as the ultimate result obtained by the treatment recommended must depend to a great extent upon their medical and administrative qualifications.

\* In Scotland by the councils of counties and, in burghs with a population of 20,000 and upwards at the census of 1911, by the town councils.

† In its application to Wales this recommendation should be read subject to the modifications which may be rendered necessary owing to the existence of the Welsh National Memorial Association.



(7) That, in erecting or adapting institutions local authorities and other bodies should avoid pretentious and extravagant buildings, and should aim rather at providing institutions of a simple and inexpensive character. It would seem desirable that provisions similar to those of section 3 of the Education Act, 1911, should be made applicable, and that due regard should be had to any Town Planning schemes.

(8) That inasmuch as the opportunities which are now afforded in general hospitals to students of medicine for the observation of the course and treatment of tuberculosis are insufficient to secure provision of an adequate number of expert medical officers, advantage should be taken of the extended opportunities which will be afforded under the proposed scheme to obtain additional instruction.

(Signed)

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DAVID DAVIES.  
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