MOTHERNITY AND CHILD WELFARE WORK.

NOTES ON THE ELEMENTS COMPRISED IN SCHEMES,

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A COMPLETE scheme for maternity and child welfare comprises the following principal elements:—

1. Arrangements for the local supervision of midwives.
2. Provision of a staff of health visitors for the home visitation of expectant and nursing mothers, and of children up to the age at which they are entered upon a school register.
3. Provision of maternity and child welfare centres at which expectant mothers and mothers with little children may come under medical supervision.
4. Measures to ensure that mothers have skilled and prompt attendance during and in connection with confinement at home.
5. Provision of hospital facilities for—
   (a) The treatment of maternal conditions, dangerous to the mother or child, arising in connection with pregnancy, labour, and the puerperium.
   (b) The confinement of women who, though not necessarily suffering from complications, are living under specially bad hygienic conditions.
   (c) The treatment of disease in young children.

GENERAL OBSERVATIONS.

In England and Wales, exclusive of London, the best results will generally be obtained if comprehensive schemes are formulated for administrative counties and county boroughs, the county councils and county borough councils assuming responsibility and acting through committees constituted as described below.

These councils are already the local authorities for the administration of the Midwives Act, 1902, and for the execution of schemes in connection with the recently inaugurated anti-tuberculosis campaign. The Midwives Act has for its ultimate object the prevention of maternal, fetal, and child disease and mortality, and therefore its administration should be closely co-ordinated with that of maternity and child welfare schemes. Moreover, all these three lines of activity (supervision of midwives, anti-tuberculosis, and maternity and child welfare promotion) involve the provision of a staff of home visitors or inspectors. If, therefore, these three lines are in the hands of the same body, it will be possible to secure a high degree of unification in the matter of home visitation. Such unification is desirable as it makes for the elimination of friction and for economy in time and monetary expenditure.

The case of county borough areas presents no serious grounds for controversy, and it is generally admitted that in such areas the scheme should be administered by the county borough council; but the case of administrative counties is complicated by the presence in these areas of district councils and municipal borough councils. Many of these constituent authorities have already adopted the Notification of Births Act, 1907, and have made provision for health visiting under this Act, and some of them (notably the councils of large urban districts) desire to go further and organise complete schemes of their own. A few of the more important urban districts may be permitted by the Local Government Board to formulate autonomous schemes. The districts coming within this category are those which are of such a size and population, and so placed in the matter of hospital accommodation and existing nuclei for the formation of maternity and child welfare centres, as to make a complete self-contained scheme a practical proposition. Districts fulfilling these conditions are very rare.

Prior to the initiation of county schemes, conference representative of the county council, the district councils, and other interested bodies should be held, and at these deliberations every endeavour should be made to induce the district councils to come into a general county scheme.

In London, schemes should be organised by the Metropolitan Borough Councils.

The Notification of Births (Extension) Act, 1915 (Sec. 2-2), permits a local authority to carry out its functions with regard to maternity and child welfare work by means of a committee which must include women and may comprise persons who are not members of the authority. The council members of the
committee should form a majority and should in the main be drawn from the Public Health Committee of the authority. The co-opted members should consist of suitable women (if such are not available as members of the council), and of persons representative of such bodies as charitable organisations undertaking infant welfare work, governors of voluntary hospitals, boards of guardians, and, in the case of county schemes, education committees of autonomous education districts and district councils. Boards of guardians are included in the above list on account of their control of medical relief under the Poor Law, and as they are responsible for the working of the Children Act, 1908.

In county schemes it is of great advantage to have local committees to which the central committee can delegate various of its functions. Each sanitary district which is included in the county scheme should be placed under the supervision of a local committee, which should consist of the district council concerned, together with representatives of the central committee and such other persons (including women) as may with advantage be co-opted. The projected formation of such local committees should be held out to district councils as a special inducement to cause them to come into a general county scheme.

SUPervision of Midwives.

The activities undertaken by local supervising authorities under the Midwives Act should include supervision of the work of individual certified midwives, provision in some form or other of means for increasing the knowledge possessed by such midwives, efforts towards the elimination of the uncertified midwife, and, in districts in which the midwifery service is deficient, the fostering of schemes for the provision of midwives.

The responsibility for supervision should be placed upon the medical officer of health or an assistant medical officer, and the actual work of inspection should be performed by female inspectors. These latter should possess the dual qualification of trained hospital nurse and certified midwife. They may be whole-time officers of the council or, in the case of counties, they may be officials of the county nursing association who devote part of their time to the work of the Council and part to that of the association. Speaking generally, one whole-time woman can accomplish the work in the smaller counties and boroughs. In larger counties and boroughs two or three women are required. The salary should be £100 to £150, according to circumstances. Combination of the appointments of inspector of midwives and health visitor is discussed later.

The supervision of individual certified midwives should be exercised by means of routine inspections of them at their places of residence, and while they are actually in attendance upon cases, and by means of special inspections made upon receipt of notices sent under Rule 20 of the Central Midwives Board. At these inspections the midwives' bags, registers, general manner of conducting cases, etc., should be investigated. Where points for adverse comment are found, the midwife should be advised or admonished. Her obligations under the Rules of the Central Midwives Board and under the Notification of Births Act should be kept prominently before her notice. In addition, the midwife should be encouraged to discuss difficulties with the inspector, for by means of such informal talks, and by the giving of systematic lectures, the knowledge possessed by midwives can be greatly increased, and they can be kept abreast of recent developments in maternity nursing.

Elimination of the uncertified midwife is necessary in the interests of patients and of certified women themselves. Frequently a warning will be sufficient to cause an uncertified woman to cease taking cases, but if this is not effective, a prosecution under the Midwives Act should be instituted. The doctors of the district should have prominently brought to their notice the undesirability in any degree "covering" the practice of unregistered women. Such "covering" as does occur is mainly unintentional, and should therefore be combated, in the first instance, by tactful remonstrance; but if clear cases occur in which a medical practitioner associates himself with an uncertified woman who is acting otherwise than as a maternity nurse under the personal direction of the doctor, the local supervising authority should make representation to the General Medical Council as suggested by the Central Midwives Board in their letter of 21st September, 1915.

HEALTH VISITING.

The duties of a health visitor are, generally, to give hygienic and dietetic advice to expectant mothers and mothers with young children, to induce mothers to come to the maternity centre, to encourage domestic
cleanliness and efficient and economical household management, and to report to the medical officer of health conditions of domestic sanitation.

All persons appointed as health visitors (whole or part-time) should be women who are trained nurses and who hold a certificate recognised by the Central Midwives Board. In addition, possession of a certificate denoting proficiency in sanitation is desirable, and, furthermore, special experience in diseases of children and a knowledge of the acute infective fevers are of advantage. All women appointed as whole-time officials (whether their duties are to relate only to health visiting or part of their time is to be devoted to other work, such as, for example, school nursing) should hold the triple qualification of trained hospital nurse, certified midwife and sanitary inspector; but where, as in the case of some country districts, it is desirable to appoint as part-time health visitors such persons as district nurses-midwives (vide infra), this high degree of proficiency cannot be insisted on. Such women are generally adequately trained as nurses, and are invariably certified midwives, but they know little of sanitation.

There are many advantages in combining the office of health visitor with other offices the duties of which and the qualifications for which are similar to those to be demanded from health visitors. Combination of the appointments of inspector of midwives and health visitor is to be specially recommended, for the health visitor has to do with the mother and child and their environment, and the inspector of midwives has to do with the midwife, who forms one of the most important elements in that environment. Such a combination reduces the number of individuals visiting any one house, and it eliminates the friction which may arise if one woman is responsible for health visiting and another for inspection of midwives. Moreover, when this combination is adopted the health visitor, in virtue of her office as inspector of midwives, is in a position to gain the confidence of the midwives and to induce them (with the consent of the prospective mother) to inform her of cases of pregnancy which they have been retained to attend. The information thus gained will facilitate ante-natal visitation.

Combination of offices may be carried still further, and the duties of school nurse and tuberculosis visitor be added to those of health visitor and inspector of midwives. The health visitor is concerned with children up to school age, the school nurse has to do with those attending school. The ideal state of affairs is that the woman official on entering a house should be in a position to take action regarding all the children in that house, irrespective of their age. Health visiting and tuberculosis visiting are both essentially public health measures, and are therefore suitable for combination.

Speaking broadly, we may say that combination of one or more of the offices specified above with that of health visitor is to be recommended, as such combination reduces the number of officials required for a given area, and, by adding to the variety of the work undertaken by each individual, widens the outlook and increases the efficiency of the members of the staff.

In initiating a system of health visiting for a given area, the exact degree of combination of appointments to be adopted will be influenced by the arrangements already existing for such purposes as school nursing, tuberculosis visiting, inspection of midwives, and, in the case of county areas, district nursing. The local authority should take stock of its resources in the matter of existing officials, and should frame a scheme which uses all such resources to the best advantage, regard being paid to the qualifications of and the work already being done by existing officials, and additional officers being appointed as is necessary.

In the case of small and medium-sized county boroughs, the best arrangement is that in which the area is divided into districts of such a size that one woman can act as inspector of midwives, health visitor, school nurse, and tuberculosis visitor in each district. In the larger county boroughs, and especially in those in which the medical officer of health is not the school medical officer, and in which antituberculosis work has been developed on highly specialised lines under a tuberculosis officer who is directly responsible to the council, the most convenient practical arrangement is that in which one set of women can act for health visiting and the inspection of midwives, another set for school work, and a third for the visitation of tuberculous cases. Between these two extremes there are several intermediate varieties of arrangement which are applicable to such a case as that of the urban district or municipal borough which is also an autonomous education district, and which refuses to come into a county health visiting scheme.
In such cases it is possible to combine the appointments of health visitor, tuberculosis visitor, and school nurse, the inspection of midwives being carried out by a separate official appointed by the county council. This arrangement has, however, the drawback that the inspection of midwives is divorced from health visiting.

In the case of county schemes, some degree of combination is essential, for, on account of the large geographical area to be covered and the comparatively scattered nature of the population to be served, if the various functions are placed in the hands of different individuals, the time spent in travelling will be enormous, and a very large number of officials will be required. The existing conditions obtaining in different administrative counties vary so greatly that it is impossible to formulate a scheme which would meet all cases, but the following skeleton is applicable to an average county:—

1. The existing inspectors of midwives, in addition to their duties under the Midwives Act, will undertake the supervision of health visitors, acting in this respect as a link between the county medical officer and the health visitor. Additional inspectors will be appointed if necessary. The inspection of midwives and health visiting are consequently in different hands, but as the health visitor is placed under the inspector of midwives, and must work to her satisfaction, the chances of friction are eliminated.

2. The duties to be undertaken by each health visitor in the area allotted to her are those of a health visitor, tuberculosis visitor, and school nurse.

3. Health visitors for all the sanitary districts which come into the county scheme will be appointed by the County Council Maternity and Child Welfare Committee as follows:—

(a) In the case of districts which are sufficiently large and compact to need the services of one or more whole-time officials, a whole-time official or officials will be appointed.

(b) In the case of districts which are not sufficiently compact to render the appointment of a whole-time official desirable, the following procedures will be adopted, according to circumstances:

(i) If a district nursing association employing properly trained nurse-midwives is in existence, the part-time services of such nurse-midwives will be utilised, the sphere of work allotted to each being confined generally to the area she serves as a nurse-midwife.

(ii) If no district nursing association is in existence, one of the three following procedures will be adopted, the choice depending upon local circumstances—

(i) Well qualified midwives practising on their own account may be employed. This is only practicable if such midwives are not competing against other trained midwives;

(ii) If the county nursing association possesses "emergency nurses," these may be used;

(iii) Whole-time women may be employed.

4. Lectures on sanitation and on the prevention of nutritional and other diseases in children will be delivered by the inspectors of midwives or by the county medical officer of health or one of his assistants for the benefit of the district nurse-midwives, etc., to be employed under the above scheme. In future the county nursing association will include teaching in sanitation, etc., in its training of nurses.

5. The health visitors will report conditions of domestic insanitation to the district medical officer of health, and, through the inspectors of midwives, to the county medical officer. If a maternity centre is established in the district under a whole-time official, the official will act as assistant district medical officer of health, and will more directly supervise the work of the health visitors.

The number of health visitors required for a given area will depend upon its size, population, and birth rate, and to a lesser degree upon its character as regards housing and density of population, travelling facilities, average social status of the inhabitants, extent of industrial employment of married women, and past experience in the matter of maternal and child mortality.

As a rule, one health visitor devoting the whole of her time to the work, should be allowed for not more than 500 births, but where the population contains a large number of well-to-do, the number of births for each health visitor may be greater than 500. Assuming that the birth-rate of the area under consideration is 25 per 1,000, application of the above standard means that one health visitor is required per 20,000 of population. The work involved in the inspection of midwives coincides
to such a degree with that involved in health visiting, that when the offices of inspector of midwives and health visitor are combined, it will be possible for one official holding the dual appointment to deal efficiently with the same population (i.e., 20,000) which requires a whole-time health visitor.

Where the offices of health visitor, tuberculosis visitor, and school nurse are combined in one individual, the proportion of time devoted to health visiting may be stated as being 60 per cent., and when such a combination is adopted, one official should be allowed per 15,000 of population. If the work of inspection of midwives were added, roughly the same population could be dealt with by one officer. Where district nurse-midwives or midwives in independent practice are employed as part-time officers in the triple capacity of health-tuberculosis-school nurses, one official should be allowed for not more than 5,000 of population, and in areas in which the population is much scattered, the proportion of population to officers should be lower and may be as low as 2,000 to 1.

In industrial districts eight visits are required, on the average, during the first year of life for each infant born. Visits paid during subsequent years of life need not be so numerous, and may be placed at 4 per child per annum. The number of ante-natal visits will vary with the number of cases of pregnancy referred to the health visitor, and according to the stage of pregnancy at which they are so referred. At present it is impossible to state an average number for such visits.

The salary offered to a whole-time officer should be £100 per annum (inclusive of uniform and bicycle allowance), rising to £110 by annual increments of £5, with travelling expenses in addition where necessary. When joint appointments are made only 60 per cent. of the salary will be payable by the maternity and child welfare committee. If women with special organising ability and experience are employed, say, as inspectors of midwives and to supervise other health visitors, the salary should be from £150 to £200. When part-time women are employed, they or their district nursing association should be paid on a population basis, 15,000 or 20,000 of population (vide supra) being taken as equivalent to £100.

MATERNITY AND CHILD WELFARE CENTRES.

In areas in which there are children's and women's hospitals possessing well organised out-patient departments, it may be possible to utilise these as centres, means being taken to develop the preventive side of their work. But in most cases this arrangement is impossible for in the majority of areas such institutions do not exist, and where they do exist therapeutics rather than prevention is their rôle. Where institutions of the nature of "babies' and mothers' welcomes" have been established by voluntary effort, means should be taken to absorb them into the local scheme and, after such reorganisation as may be necessary, to utilise them as centres.

This does not mean that voluntary effort should be ousted; on the contrary, it should be utilised and fostered. But, if the scheme is to be successful, it is essential that the local authority should have control over all its component parts. With the object of utilising and fostering voluntary effort to the fullest extent, suitable representatives of "babies' welcome" societies and similar bodies should be co-opted as members of the maternity and child welfare committee. In addition to work on the committee, the services of voluntary workers are specially valuable in advertising the activities of the centre and scheme generally, in arranging for any social work which may be necessary, in the provision at the centre of the cup of tea dear to the feminine heart, and in promoting a spirit of neighbourly helpfulness and friendliness. Furthermore, voluntary funds will be useful for the provision of material assistance to such cases as require it.

The clientèle of centres will be obtained through the good offices of doctors, midwives, and voluntary workers, and through the operations of health visitors and inspectors of midwives. In addition, expectant and nursing mothers may resort to the centre of their own initiative. When making a visit under the Notification of Births Act, the health visitor will point out to the mother the advantage to be gained from taking her child to the centre. This Act is therefore of great assistance on the post-natal side of centre work. Moreover, it gives the health visitor the entrée to the house, and an opportunity of advising the mother, in the event of future pregnancies, to resort to the centre. It is therefore of some assistance on the ante-natal side, but for its ante-natal clientèle the centre will be largely dependent upon doctors and midwives who should be encouraged by all possible means to refer cases to the centre. Medical practitioners should be shewn that their co-operation is required, that
their relationship to the centre medical officer will be that of a private practitioner to a consultant, that cases which they desire to treat themselves will be referred back to them, and that the centre, far from being meant to usurp the place of the private doctor, is intended to enhance his work, and to provide special medical attention for those who would not otherwise receive it.

The number of centres required varies. In county boroughs, even of large size, one centre may suffice if it be so located as to be easily accessible from all the poorer districts of the town. But where the working class districts are scattered, several centres should be provided, for if mothers have to travel long distances to the centres they will not attend with the desirable degree of regularity. Districts possessing high rates of infantile mortality should receive special attention when the location of centres is being considered. In county schemes the centres should be so placed that they will serve the greatest possible area and population, due regard being paid to travelling facilities. Frequently, a centre placed in an urban district can serve the surrounding rural districts, but often it may be necessary to locate centres in the larger villages of rural districts.

Existing buildings may be utilised as centres or new structures may be provided. Whenever possible, buildings already in occupation as school clinics or tuberculosis dispensaries should be used. The size depends upon the population to be served. A minimum of two rooms is required, one to act as a waiting room and the other as a consulting room. A third room, to be utilised for the weighing of babies, is an advantage. Warming arrangements, sanitary and lavatory accommodation, means for artificial lighting, and a covered place for the storage of perambulators, should be available.

The cost of a new building may vary roughly from £800 to £1,500, according to size, the price of land, and other local circumstances. Rents for leased premises will depend upon the size of the premises, and upon their situation, and may vary from £12 per annum in small urban areas to £150 per annum in large boroughs. Annual cost of upkeep (rates, coal, lighting, caretaking) may be anything from £10 to £100. Equipment required for centres includes tables, chairs, cupboards, for records, etc., a couch for abdominal and other examinations, washable overalls for staff, wire-cage receptacles for babies' clothes, an accurate weighing machine, urine testing apparatus, various gynaecological instruments, etc. Equipment will cost from £50 to £150.

The staff required at a centre consists of medical and non-medical workers. With regard to the medical staff, the best arrangement is the appointment of one or more whole-time officers, male or female, experienced in diseases of women and children, and in the hygiene of the home. The salary should be £350 to £500, with prospects of increase. In some cases the appointment may be combined with that of assistant medical officer of health, school medical officer, etc. When specialists not engaged in general practice are available locally, they may be employed as part-time officers. Remuneration offered should be £1 per session of 2½ to 3 hours. If circumstances make it necessary to appoint a general practitioner, the practitioner appointed should not be in practice in the area served by the centre. The non-medical staff should consist of the local health visitors and such efficient voluntary workers as are available.

During a session lasting 2½ to 3 hours, one medical officer can deal with 23 to 30 cases, including not more than 8 to 12 new ones. The medical staff required and the number of sessions to be held each week will be decided by applying this standard to local conditions. Where the number of pregnant women attending is large, separate sessions should be devoted to ante-natal and post-natal consultations, but where the number is small, these women should be seen at the beginning or end of the post-natal consultation.

The work to be done at the centre embraces—

(1) The medical examination of cases. According to circumstances, new cases will be—

(a) Taken on the books of the centre for continued supervision, etc., or
(b) Referred for hospital treatment or for treatment under a private practitioner, or
(c) Referred back to their own doctor or midwife.

Cases of disease which cannot be admitted to hospital and which require anything beyond simple treatment and hygienic and dietetic advice, should not be undertaken without the co-operation of a general practitioner, who would be responsible for dealing with any sudden emergency.

The majority of the infant and child cases will be in need principally of hygienic and dietetic advice, and will be placed in category
(a). All apparently healthy infants and children should be placed in this category. In the case of pregnant women placed in category (a), arrangements must be made to ensure that some private practitioner, midwife, or institution shares responsibility with the medical officer at the centre, so that the woman may have proper care at the time of labour and immediate attention in the event of some emergency arising.

All cases in category (a) must be seen at regular intervals by the medical officer. For infants, weekly intervals should be aimed at, and, at all events, the interval should not be longer than four weeks. In the second year, it may be extended to two months. From the end of the second year till the time at which the child is entered upon a school register, it should be examined at quarterly intervals. If during an interval the health visitor or mother finds that the child is not progressing favourably, it must be brought to the centre at once.

In children, the examination should include accurate weighing, and should relate especially to nutritional diseases. In pregnant women, the primary examination should include investigation of the heart, lungs, kidneys, alimentary system, and breasts, of the pelvis for contraction, and of the mouth for oral sepsis; subsequently the urine should be examined weekly.

Cases placed in category (c) will be seen at intervals settled in consultation with the doctor or midwife. A case will be moved from one category to another, as occasion demands.

(2) The giving of hygienic and dietetic advice and of such treatment as is provided.

The advice required by expectant mothers relates to diet, clothing, and exercise, to the care of the breasts, to the preparations which should be made for the infant, etc. Advice to mothers with children should bear upon the importance of breast-feeding, upon the proper method of carrying it out, upon the provision of a suitable substitute for the mother's milk in cases in which breast-feeding is impossible, and upon the clothing, feeding, and management of children generally.

Actual treatment will be of the simplest character. Few drugs should be used, and those mainly aperients and simple ointments and dusting powders. Cod-liver oil, malt extract, and simple appliances, such as bandages for varicose veins, should be provided gratuitously. Dried milk should be supplied at cost price. In all cases of artificial feeding definite written instructions should be given to the mother.

(3) The keeping of records. These should be in card form and on the lines laid down on pages 12-13 of the Local Government Board's memorandum on health visiting, with the addition of the graphic method of weight record to the Infant Form.

(4) Research regarding the special local circumstances leading to maternal and infantile mortality in the area concerned, and regarding the causation of abortion and still-birth, and the factors which act as mortality producers during the first year of life.

(5) The holding of systematic "health talks," and other suitable classes by the health visitors and voluntary workers.

I consider advice and instruction given individually and practically more valuable than such classes, but collective instruction in simple domestic economy and the making of babies' garments may frequently prove valuable. Voluntary workers may undertake such work. Model babies' garments should be on view.

MEASURES TO ENSURE THAT THE MOTHER HAS SKILLED AND PROMPT ATTENDANCE DURING AND IN CONNECTION WITH CONFINEMENT AT HOME.

The local authority should make arrangements for the payment of fees to medical practitioners called in to attend cases of difficulty which are under the care of midwives, and which are not in a position to pay for the attention required. The following scale is suggested:—

For delivery with forceps, or other operation requiring an anaesthetic, and subsequent attendance .. £2 2 0

Other difficult cases, not requiring forceps, etc. .. .. .. .. .. .. .. 1 1 0
Single attendance at night .. .. .. .. .. .. .. .. .. .. .. .. 5 0
Single attendance by day .. .. .. .. .. .. .. .. .. .. .. .. 2 6

In areas in which a voluntary maternity hospital is in existence, this branch of the scheme would be carried out by its external branch under an arrangement between the local authority and the governing body of the institution.

HOSPITAL ACCOMMODATION.

Existing institutions, such as voluntary general, maternity, and children's hospitals, Poor Law infirmaries, and cottage and isolation hospitals, situated in the area concerned or
within a reasonable distance of it, should be utilised to the fullest possible extent, suitable arrangements being made with their governing bodies. Where institutions already exist but fall short in some particulars (such as amount of accommodation) of the requirements of the local authority, the local authority should consider the possibility of having such institutions adapted to its needs in return for a subsidy. A local authority should undertake the provision of new hospital accommodation only when existing institutions cannot provide it.

The amount of hospital accommodation required will depend roughly upon the same factors as those specified as governing the number of health visitors to be appointed. It is difficult to state definite figures, but I calculate that the provision of beds should be roughly on the following scale:

- Beds for women (exclusive of puerperal fever) — 1 per 300 births.
- Beds for cases of puerperal fever — 1 per 2,000 to 2,500 births.
- Beds for children (exclusive of the ordinary infective fevers and epidemic diarrhoea, but including ophthalmia) — 1 per 200 births.

These figures probably err on the side of meagreness, and in all schemes allowance should be made for expansion in case this should prove necessary.

Epidemic diarrhoea should be treated in existing isolation hospitals, as these are generally at their emptiest when epidemic diarrhoea is most rife. Selected cases of measles and whooping cough should also be admitted to such hospitals, so far as circumstances permit.

Payment to be made to voluntary maternity and children’s hospitals will average £2 to £2 10s. per bed per week.

The cost of cases treated in isolation hospitals will depend upon local circumstances, such as size of hospital, and may vary from £50 to £100 per bed per annum.

Women’s and children’s hospitals provided by the local authority will probably cost in capital expenditure about £400 per bed. Running expenses will average about £110 per annum per bed.

Officers doing duty at the centres may be placed in charge of the women’s hospital, and the physician conducting the post-natal consultations in charge of the children’s hospital. In whole-time joint appointments the salary of £350 to £500 would cover work at the centre and at the hospital. In part-time appointments the physician (already in receipt of £1 per session for work at the centre) should receive £100 to £200 per annum for hospital work.

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In addition to the special activities outlined above, the local authority should co-ordinate with its scheme the operations of day-nurseries and similar institutions founded by voluntary effort, and should aid the education authority by the loan of officials for the teaching of mothercraft at schools and continuation classes. Moreover, by exercising its powers under the Public Health Acts and other acts bearing upon health, by the adoption of the adoptive acts of 1890 and 1907, by promoting local acts, and by the making and enforcing of bye-laws, etc., the authority should do its utmost to remedy insanitary domestic conditions. The conditions of domestic insanitation which are believed to be specially inimical to infant and child life are inefficient methods of refuse and excrement removal, defective paving of yards and streets, deficient food storage accommodation, overcrowding, and general domestic uncleanness.

There are factors bearing upon maternal and child mortality which cannot be directly dealt with in a scheme. But the local authority may ventilate these by discussion, and by petition to appropriate government departments, and may, in some cases, include clauses regarding them in a Bill which it is about to promote in Parliament. Matters coming within this category include:

1. The exclusion of pregnant women from certain occupations (to be scheduled), involving lifting of heavy weights or in other respects arduous, for a period of, say, two months prior to the expected date of confinement, the wage for this period to be paid in half by the State and in half by the employer.

2. The provision by the occupiers of factories of arrangements (such as day-nurseries) for the care of children under three years belonging to women employed by them.

3. Control of the sale of abortifacients (e.g., diachylon) on lines similar to those recently adopted in the case of cocaine.
(4) Control of burial clubs and similar organisations on the lines of the expired Act 13 and 14 Vic. c. 115.

(5) The more adequate control of the milk supply.

(6) Amendment of the Midwives Act, to make it more easy to secure convictions against unregistered women.

(7) Amendment of the Factory and Workshop Act, 1901, by deletion of the word “knowingly” from section 61.

THE VALUE OF ISOLATION OF INFECTIOUS CASES.

The value of isolation of cases of infectious disease has to be considered in respect of two separate conditions, the one in the home, the other outside the home. In the case of such diseases as scarlet fever and diphtheria, the early removal of the sick from the midst of a family has a value which has been appraised in various recent publications, and which has been found not to be negligible. In respect of the value of isolation in reducing the risks of infection outside the home, it may be admitted that it is probably smaller, and that there will remain sufficient opportunity for disease to be maintained in a community by the continuance of infection by unrecognised cases and carriers. In the matter of phthisis, owing to the disease being more insidious in its earlier stages, and owing to its much longer duration, it is difficult to safeguard the home to the same extent as in the case of diseases which have a sharper onset and a shorter duration. The actual value of such isolation as is practicable needs to be considered in any proposal that compulsory powers should be obtained to require isolation of cases deemed to be infectious.

DEATH RATE FROM HEART DISEASES IN U.S.A.—It is announced by the Bureau of the Census, Washington, D.C., that diseases of the heart killed more people in the United States than any other disease. In 1900 the death-rate from heart disease was 123.7 per 100,000 people, and in 1914 increased to 150.8 per 100,000 people, thus securing first place in the ranks of causes of death.

POLIOMYELITIS IN NEW YORK.—The Infantile Mortality statistics for the quarter ending 30th September, 1916, show 784 deaths in the group between one and five years, due to the epidemic of poliomyelitis.

THE PASSING OF SMALL-POX IN BRITAIN: TO WHAT IS IT DUE?*

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Medical Officer of Health, Leicester.

FOREWORD.

It is now over 32 years since the town of Leicester revolted against compulsory infantile vaccination, and during this period an average of only 10 per cent. of the children born have been vaccinated. Prophecies were freely made at the outset by the highest medical authorities as to what the consequences would be if this foolish course were persisted in. It was confidently predicted that when a sufficient amount of “inflammable material” had accumulated, small-pox would return as a “red terror” and decimate the population.

These predictions have not been fulfilled. Leicester has not suffered from small-pox any more than other large industrial centres; and during the last decade, indeed, not a single inhabitant† of this unvaccinated town has been attacked by the disease. The experience of the country generally has been very similar, in spite of the increasing neglect of infantile vaccination. The time would seem to have arrived, therefore, when the question of the relationship of small-pox to infantile vaccination may be usefully reviewed.

It is not lightly or without due consideration that the writer has felt constrained to take up an attitude on this question which is in conflict with that held by the majority of medical officers of health. He is well aware that by most medical men the question of vaccination is believed to be finally settled beyond the possibility of doubt. The conclusions here set forth, however, have been forced upon him during the twelve years since he first ventured to place his views tentatively before this Society,‡ and since then those views have only been confirmed and strengthened.

To prevent misunderstanding and misrepresentation, the writer wishes to make it quite clear that he accepts as a fact—absolutely proven beyond the shadow of a doubt—that recent vaccination confers complete protection to

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* Read at a Meeting of the Society of Medical Officers of Health, on 19th January, 1917.
† One case of small-pox was imported in 1913 by a visitor to Leicester from South America. No spread occurred. The last death from small-pox in Leicester occurred in 1904.