

CHANGING HEALTH CARE DELIVERY SYSTEMS

Paper prepared by the Commonwealth Secretariat

There is no question about the increasing emphasis that is being placed in most countries on providing health care facilities for all members of society. This new emphasis is reflected in the wide recognition of the need for an appropriate balance between institutional and ambulatory medical care, in the importance placed on prevention rather than treatment, in the acceptance of the health team concept as the basis for effective health care delivery, in the commitment by most Health Ministries to train a balanced mix of health professionals for redefined roles in redesigned health programmes, and in the acceptance of the need for radical reforms in systems of health planning and administration.

2. In the prevalent models of health care the facilities for treating the sick and the professional services with which they are associated are commonly located in urban areas where the minority of the population live. These same areas attract the graduates of medical and nursing schools, because their professional training has been geared to this level of medical care. It is also true that large numbers of people in urban centres may be inadequately served for reasons such as poverty, ignorance, inadequate motivation, lack of opportunities for community participation, and the fact that advances in medical technology often tend to make medical facilities more, rather than less, accessible to the majority of the population. The Colombo Medical Conference, with its emphasis on the health of rural communities, made a significant contribution to the plans of Commonwealth countries for broadening the basis of their health programmes. It is hoped that the Wellington Conference will provide added momentum in this direction.

3. The papers from member countries to this Conference lay stress on the need for a wider community orientation of medical services. This need was also strongly emphasised by the Minister of Health of the host country at the opening of the Conference of Women and Health held in Wellington in February 1977. "The New Zealand Government", he said, "is endeavouring to change the direction of the health juggernaut which, having spent its money well providing a public and private hospital service, must move out into the community where use can be made of everybody who can contribute. Doctors, nurses, physiotherapists, health assistants and other paramedical people must move out into the community. It is essential that our services be reorientated and that the money available for health services is wisely spent".

4. Factors of importance for effecting change in national health care delivery systems include:

- (a) health manpower training policies;
- (b) local planning, administrative and executive capacities in the health field; and
- (c) the level of popular and political support that can be mobilised for the promotion of national health plans.

Health manpower development

5. Health manpower production is undoubtedly a crucial element in national health programmes. The training of health professionals can no longer be allowed, as is often the case, to proceed independently of the quantitative and qualitative needs of communities. The requirements for closing the gaps between training goals on the one hand and health service requirements on the other will vary from country to country. The problems that are common to the majority, however, are:

- (a) the low priority which is so often given to health in national development programmes;
- (b) insufficient numbers of appropriately trained personnel at all levels, but particularly at the intermediate level; and
- (c) a general lack of training standards and of criteria based on local needs.

6. There is still too commonly the assumption that improved health care means more doctors and more nurses, trained along traditional lines to carry out traditional roles in systems of health care designed elsewhere. Another factor that contributes to the quantitative problems is the migration of qualified health manpower, which is itself also a subject for discussion at the Conference.

Health planning and administration

7. Improvements in the health of communities will be largely determined by the adequacy of the local planning and executive capacities. Health plans must not only be kept within the country's technical and economic capabilities but must also be relevant to its needs. It is here that the concept of self-reliance assumes particular importance. Models copied from elsewhere do not necessarily provide the right solutions for local health problems.

8. The responsibility for instituting the appropriate changes clearly lies with individual Governments. The difficulties that will be encountered by them in the initial stages are likely to be attitudinal and psychological rather than practical. New approaches, rather than new knowledge or more resources, are needed. The approaches involve, for example, the assumption of fresh attitudes to planning, rather than just new plans, and greater flexibility, adaptability, innovation and independence of thought than have been customary in the past. In addition, it happens all too often that Ministries of Health and other government planning agencies are so busy with the immediate task of carrying on the administration of present health service programmes that they cannot find the time required for the successful prosecution of new approaches and initiatives.

Popular and political support

9. Insofar as community health is a matter of national policy, the responsibility for it must rest with the government of the country. Before appropriate programmes can be launched, many basic changes need to be introduced in existing health systems in most countries. In this connection the Secretary-General of the World Health Organisation has pointed out that "in the final analysis, political decisions will have to be taken in many countries if they wish to institute the extensive reforms required to define sound goals for health, to formulate pertinent health policies and to translate these policies into programmes and services", and experience has shown that it is only by the positive involvement of individuals and communities themselves in such programmes and services that they can be effectively implemented.

10. Relevant questions, therefore, are:

- (a) How best can political decision-making in health be influenced in member countries?
- (b) What are the requirements for the effective involvement of individuals in community health programmes?

Practical measures

11. The Governments represented at the Commonwealth Medical Conference will be all too familiar with the arguments in favour of improving the health of communities, and further repetition is hardly needed. What need examination are the practical measures that can be taken to achieve these objectives. How precisely can the community itself be brought to share the responsibilities for promoting the health of the individuals that comprise it? What modifications of its food and nutrition policies are needed? How can the activities of medical schools and other health education agencies be more precisely channelled towards national health goals? What is the design of the national health plan? Is it economically and technically feasible? What are the actual steps that need to be taken to mobilise the national resources necessary for its implementation? What changes are required in the administrative arrangements for health care delivery? These are some of the pragmatic questions with which most countries must now be concerned.

A Commonwealth Secretariat contribution

12. It is towards practical initiatives that the resources of the Commonwealth Secretariat may be best directed. A useful initial Secretariat contribution might be the provision of a consultant whose central function would be to assist individual countries and Governments, on request, in setting up, co-ordinating and monitoring the progress of national health manpower production and health administration programmes, especially at the intermediate management level. In addition, he could ensure continuing exchanges of knowledge and views of relevant health issues among member states.

13. The consultant's terms of reference might fall under three main heads: national, regional and inter-regional.

(a) *National* – He would visit Commonwealth countries on request and:

(i) assist Ministries of Health, medical schools and other manpower training agencies to ensure that their health manpower training and health administration programmes are as effective as possible and closely related to local needs;

(ii) advise on the appropriate committee structure and methods for providing continuity of planning and action with respect to any decisions that are reached; and

(iii) make follow-up visits and devise appropriate evaluation procedures for the methods adopted.

(b) *Regional* – In order to help the promotion of maximum economy and mutual assistance in the use of health personnel within regions, he would:

(i) assist Health Ministries, local universities and health agencies to identify individuals in the region whose skills could be used on a regional basis;

(ii) advise on and help to establish appropriate regional training programmes; and

(iii) seek to identify opportunities for promoting continuity of action, methods of evaluation and other relevant functions at the regional level.

(c) *Inter-regional* – His role here would be to:

(i) advise on the co-ordination of health training and administration programmes between regions; and

(ii) identify areas for inter-regional collaboration and initiatives.

13. In all this he would emphasise the practical measures that might be adopted by Health Ministries, universities and other health agencies in planning new approaches to health care delivery.

5 October 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Australia

This paper sets out briefly some of the reasons why Australia in its current stage of development has the health care delivery system it actually does; discusses the problems associated with changing such a system to make it more responsive and appropriate to the health care needs of the population; and traverses some aspects which may be considered relevant in planning for, and administering, appropriate health care delivery services in countries which do not have an entrenched health care delivery system.

History

2. Historically, formal health care as we know it in Australia today originated in the religious hospices in Europe and the Middle East where members of religious orders gave succour to pilgrims and other travellers. Over time these hospices expanded their work to care for the “needy poor”. As knowledge of disease processes increased, the hospices became centres of learning and research. Consequently, hospitals assumed an increasingly important role and status in the community and eventually replaced religious institutions as places of special importance. Likewise, as medical practitioners succeeded in conquering major killers such as infectious diseases, they also achieved an elevated status and mystique — indeed often supplanting religious leaders who had been pre-eminent in society until the twentieth century.

Australia today

3. Australia has inherited a hospital-oriented health care delivery system dominated by medical practitioners and focused on curative medicine. This mode of health care delivery has grown largely unrestrained, with the consequence that several aspects of the nation’s health and well-being have received inadequate attention. For example, work aimed at avoiding the use of costly curative medicine resources by, say, improving community-based support services, preventive and health education programmes, has consisted mostly of unco-ordinated studies and ad hoc “trial” projects which have met with limited success.

4. The need for improvement has been recognised particularly in the mental health area where, in Australia, there is now a significant trend towards prevention rather than cure. In this area, active community-based support services are being developed to enable people to return to full participation in our society at the earliest opportunity, rather than the more traditional approach of residence in a mental hospital.

5. In recent years, cost of health care delivery has risen astronomically. The proportion of Australia’s gross national product has risen from 4 per cent to almost 8 per cent in the last 15 years, and Australians are spending on “health” some 20 per cent more in real terms than they were ten years ago. Yet the health status of Australians, as measured by average life expectancy, is marginally worse than a few years ago. This, together with other factors, has led to an increasing pressure to evaluate effectiveness, efficiency and quality in our health care delivery systems. It is obviously essential to ensure that such pressures do not increase health care delivery costs with little or no improvement in system quality or effectiveness as, for example, has been alleged about the PSRO systems in the USA.

6. To counteract this, it will be necessary to rethink some of the basic premises and assumptions on which our health care delivery systems have been based. There will be a consequent need to develop imaginative alternatives to many aspects of our present systems. This process will be a slow one because of the enormous investment in health care delivery resources already committed (e.g. facilities and manpower, as well as consumer expectations).

7. Despite the large problems in an entrenched health care delivery system, effective planning and management of a nation's health resources must be introduced because the health of its people is any nation's most valuable resource.

The innovation problem

8. As in most countries, and perhaps fortuitously, there are always constraints on innovative action. They at least ensure that action taken is less likely to be precipitate and more likely to meet the unfolding practical needs of the situation. A logical long-term plan able to be adjusted to unexpected factors would seem the desirable goal.

9. Australia is a federation of six States and has two major Territories, and its constitution, agreed to by each of the State Governments and enacted through the Parliament in Westminster, has transferred certain prescribed functions to the Federal Government. In health care delivery this has resulted in State and local authorities autonomously operating most health care delivery services. The Federal Government is primarily involved in contributing to the funding of these services through the general revenue sharing and loan arrangements and, in addition, it contributes through specific programmes to support special areas such as the construction of hospitals and the development of community health services in the States. Its responsibility as regards the direct provision of health services embraces health services for the Territories and certain specialised services such as the Commonwealth Pathology Laboratories, and reference services such as Australian Radiation Laboratories, Australian Dental Standards Laboratories and the National Biological Standards Laboratory. In addition, the Federal Government directly provides health services in connection with certain welfare programmes, and for members and ex-members of the armed services, utilising generally the health services in the community, except for Veterans' hospitals.

10. Because of the federal nature of the political system, and the resultant pattern of responsibility for health care as outlined, national plans concerning health care are general in nature and expressed in political terms, and as such are subject to revision against the evolving political scene. A similar situation exists to a varying extent in each of the six autonomous States, but the practical requirement for each State to have effective on-going health services means that practical expression in terms of health care resources is given to the generalised statements on health care.

11. A further constraint to innovation stems from legislation which, over the years, has entrenched the tasks and roles of existing occupational groups, together with the concomitant expectation of patients and clients that members of certain occupational groups provide certain types of services. For example, medical practitioners are traditionally, and legally, regarded as those responsible for diagnosing health problems and prescribing treatment. The community seems gradually to be coming to the view that the role of the ancillary and helping professions can well be expanded to more closely affiliate with that of the medical practitioner in a co-ordinated "health care" team. This is probably especially so in mental health problem solving.

12. There is also the significant constraint against innovation existing in the traditional public accounting systems. The inbuilt checks and balances of these systems do guarantee against dishonesty or failure to utilise funds as directed by Parliament, but they carry the collateral factor or rigidity in application. An element in this traditional system of accounting is the appropriation of funds on an annual basis and funds remaining unspent at the end of the fiscal year are returned to consolidated revenue. Private industry in some respects can afford to allow flexibility where it wishes to accept the risks involved.

13. The Federal Government has allocated funds for the purpose of making Health Programme Grants to assist in the development and evaluation of alternative forms of health care delivery and of procedures to foster cost containment.

14. We are hopeful that new stratagems for funding health care operations, particularly the large scale hospitals, may be developed which, while falling within the broader parameters of statutory fiscal accounting requirements, will more effectively contribute to better management of resources. In particular, we hope that arrangements will be developed to foster flexibility in the allocation of funds within the institutions and acceptance of responsibility in the utilisation of

such funds by those in charge of discrete areas – e.g. areas of medical specialisation – and provide incentives in the form of reallocation of portions of savings to projects nominated by the areas effecting such savings.

15. In a broader perspective, longer-term changes in the health care sector of the community will obviously respond in terms of policy evolution to the social, technological and legal requirements reflecting community aspirations and mores.

Implementing innovative change

16. The difficulties of implementing change in the health industry do not differ basically from those in any other industry; they just vary in magnitude. The key to change is people – people who have spent many years consolidating particular behaviour patterns in the delivery of health care.

17. Lasting change in the delivery of health care in Australia, as elsewhere, can only be achieved if the changes become part of the *normal* behaviour of health care providers. If this change in behaviour does not happen, and the innovation does not become part of their work life-style, then its effects will remain only as long as the innovator keeps up the pressure. Once the innovator leaves the organisation or loses interest, then the changes produced will disappear.

18. Often, the people affected by such “temporary” changes become disillusioned with innovation, resistant to future attempts at innovation, and consequently the organisation (and its patients) are worse off than they were before the attempted innovation. For these reasons change in behaviour is unlikely to succeed if it is imposed from outside the health care delivery system – as it would be in the case of legislation being used to impose a particular form or practice of health care delivery.

19. If change is to succeed it is axiomatic that providers in the health care delivery system perceive that there is a benefit to them in any proposed change. This does not necessarily mean that money itself will be an incentive for such behaviour change. Incentives may include such things as providers having “a greater say in their own destiny and way of providing health care”, or “almost complete autonomy within an organisation and being able, say, to retain savings made on agreed budgets in order to provide a higher quality service”.

20. Similarly, consumers of “health care” will probably need incentives, and education in new or alternative forms of health support or delivery. Also they may need reassurance that their health will be safeguarded in such changed systems.

Planning for, and administration of, change

21. The crucial role of all levels and types of health authority, in making changes for the improvement of health care delivery systems, is that of a catalyst. This can be achieved by the authorities seeking legislative changes which assure an environment which encourages improvement and innovation, and which provide incentives for, and recognition of, innovative change. These changes would, of course, seek active participation of providers (and consumers) in identifying problems and areas of unmet need, in developing and evaluating alternative strategies and policies, and in implementing changes to health care delivery systems identified in this process. Also embedded in this process would be the development and promulgation of effective “national” health plans and policies, which in a federal system involves a need for a high degree of co-operation and consensus.

22. Thus planning for change to existing health care delivery systems (or design of new systems) needs to have these factors as a central theme. This is so that systems are in fact responsive to evolutionary change as future needs appear, and also so that these plans can be managed in a way which facilitates rather than prohibits or regulates.

23. This involves a revolution in thinking about health and health care delivery systems. Such a revolution in thought will be vital if our health care delivery systems are to evolve in a responsive way, rather than automatically remain in entrenched traditional practices which do not necessarily reflect present demands or perceived future needs.

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Cyprus

It is true to say that even in the case of the more advanced countries the health care delivery systems are the result of continuous evolution and that in many of these systems we can discern the more recent changes in the system which have been superimposed on the older infrastructure.

2. In the case of Cyprus, the system has evolved gradually, hand-in-hand with the changes in the economic and social system and the political changes, especially those that have taken place since Cyprus's emergence as an independent state in 1960.

The existing system: a brief description

3. The present health care delivery system is a two-pronged one. We have on the one hand the public health services providing a full range of medical services and applying on a long-term and sustained basis various measures in the field of public health (sanitation, etc.). On the other hand, we have the private medical services, which have a complementary role and are utilised mainly by the more well-to-do section of the population. It is estimated that the health care needs of about 75 per cent of the entire population of Cyprus are met by the public health services.

4. Health care services are admittedly very costly and sometimes the cost is prohibitive even for the richer members of the community. It is therefore absolutely essential to apply the principles of social justice with regard to the sharing of the cost involved. The system in force in Cyprus takes into account these principles. Thus, persons with a low family income (lower and middle classes), persons displaced from their homes (about 200,000, or 40 per cent of the population), civil servants, policemen and publicly-assisted persons enjoy medical care services at government hospitals and medical institutions either entirely free of charge or at nominal charges. Other persons who can afford to pay and who make use of the public services are charged fees at rates which are generally lower than those in the private sector. The organisation of the system is broadly as follows.

5. At community or regional level, primary health services are provided by general practitioners, dentists, pharmacists, midwives, nurses and health visitors based on rural health centres established in population centres and covering the communities of the area. The team is also responsible for providing preventive school health services. There is also a public health inspector in the area responsible for sanitation work and other public health activities which are a joint responsibility of the central Government and of the local authorities. Patients needing further investigation or hospitalisation are referred to district hospitals or to the Nicosia General Hospital.

6. In each district there is a government general hospital which offers health services in all basic specialities. At the apex of the public system, there is the Nicosia General Hospital which is both a district hospital and a referral hospital for certain specialised services, such as haemodialysis, radiotherapy and neurosurgery, which are not provided by other district hospitals or the private sector.

7. The private sector of medicine operates mainly in the urban areas. There are private clinics for both in-patient and out-patient services and also a number of family doctors and dentists.

8. Responsibility for the operation and development of the system rests with the Ministry of Health which also exercises supervision over, and provides guidance and help to, the non-governmental part of the system.

Objectives and main strategies

9. Health development ranks very high in the overall five-year development plans of Cyprus and has full support at all national levels. Health development receives full support from all political quarters since it is recognised that the attainment and maintenance of a very high standard of health is not only a means to attaining further economic progress but also an end in itself — a condition which ensures personal happiness for the individual and the community.

10. The long-term objectives as set by the Cyprus development plans in the field of health are to attain a high standard of health services so as to be able to offer the best possible medical care and attention to all citizens and to continue to implement an effective programme of preventive medicine and hygiene so as to minimise the incidence of disease. These two objectives have been pursued consistently through the implementation of appropriate measures and projects which may be summarised under three main headings:

- (a) expansion and improvement of hospital buildings and equipment;
- (b) quantitative and qualitative improvement of health personnel;
- (c) institutional and organisational changes which were considered to be essential for attaining long-term objectives and specific targets.

11. It is with deep regret that it must be mentioned here that the Turkish invasion of Cyprus which took place in July–August 1974, the tragic consequences of which are very well known, disrupted the economic and social conditions of Cyprus and halted the progress of the Cypriot people towards a higher standard of living and welfare. Ever since the invasion, the Cyprus Government has been implementing emergency programmes in an effort to revive the economy and to ensure the survival of about 200,000 Cypriots who were forcibly displaced from their homes and work-places by the forces of invasion. In the field of health, the services concerned have been fully mobilised and redeployed in order to meet emergency problems such as the threat of epidemics and the delivery of health care to the displaced and needy persons who had to be accommodated in temporary camps under living conditions which would shock the conscience of any reasonable human being living in the second half of this century. The rapid readaptation of the public health system in response to the new demands posed by the emergency conditions created by the Turkish invasion has made it possible to afford adequate health care services to about 70–80 per cent of the population (as against 40–50 per cent in the pre-invasion period) and to prevent the outbreak of epidemics and the occurrence of serious diseases.

12. In so far as the improvement of hospital facilities is concerned, over the past ten years there has been a gradual increase in hospital bed capacity and an increase in hospital and medical equipment of all kinds, and this has strengthened the armamentarium at the disposal of the government health services. The demands have not, however, been fully met and plans have been prepared for a phased development in this field.

13. With regard to health personnel, the number of doctors and dentists in Cyprus is sufficient and will increase in future. The present proportion is one doctor to one thousand of the population and one dentist to three thousand. Cyprus has no medical or dental schools; Cypriots are studying medicine and dentistry in other countries. Nurses, midwives, health visitors and health inspectors are trained locally and the intake is based on anticipated needs. Other para-medical personnel can be easily recruited since many Cypriots receive training overseas in various fields, including laboratory technology, radiography and physiotherapy.

14. Staff development is pursued through five-year training programmes drawn up on the basis of requirements in the various fields. The training envisaged is usually postgraduate or postbasic, and efforts are being made to finance it under scholarships made available within the framework of bilateral or multilateral technical assistance programmes. The Government of Cyprus has decided to go ahead with the establishment of a university in Cyprus which will include a faculty of medicine. When this project materialises, Cyprus will become self-reliant in basic health manpower.

15. Concerning institutional and organisational changes, there are three main areas in which reform is planned.

16. The first is the reorganisation of the central services of the Ministry of Health so as to ensure better planning, more effective follow-up of development and routine activities of operational units and, generally, an improvement in the quality of administration.

17. The second is the strengthening of the rural health services which provide primary health care. New rural health centres and community health clinics are being planned, and existing ones are being strengthened by posting additional staff and increasing the range of basic equipment. A cottage hospital will be established soon in a mountainous area as part of an integrated development plan for this area. The significance of these programmes lies in the fact that primary health care will be provided as far as possible nearer to the home of the patients and that health services in the rural areas will be provided on a more rational and integrated basis. Other developments are the recent introduction of a school health service and the establishment of geriatric homes in the near future.

18. Thirdly, as a means of achieving the long-term objective of providing the best possible health care to all the citizens and in conformity with the principles of social justice, the Cyprus Government is studying the question of introducing a general state-controlled scheme for the delivery of medical care, which will replace the existing schemes of the public and private sector. The introduction of such a scheme will lead to quantitative improvements in the services to be provided, it will have a broader coverage with regard to persons eligible for health services, it will enable the maximum possible utilisation of all available resources, public and private, and it will provide for a more equitable sharing of the costs which medical care involves. Such a scheme will inevitably entail organisational and institutional changes which will arise mainly from the linking of the private sector of medicine with the public health services which will operate the scheme. It is envisaged that at some stage of the studies already undertaken, experts from overseas will be needed in order to make available to the local study-group advice and guidance.

5 September 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of New Zealand

In the past there has been little co-ordinated health manpower planning in New Zealand. Training policies were left largely to the various health professions and organisations who operated independently, often without adequate information and without necessarily taking account of the needs of the total health service. This situation still exists in several areas and it is difficult to change deeply entrenched customs and practices where it is imagined that jealously guarded autonomy may be threatened.

Health manpower training policies

2. In these circumstances changes of attitude are slow, but steps are being taken to remedy this by introducing integrated manpower planning. There is increasing involvement of public agencies in professional training, which should eventually enable training policies to be more closely aligned to health service requirements and community health needs.

3. A small manpower planning section was set up within the Management Services and Research Unit of the Department of Health. Its functions are to develop and maintain a data base (using annual questionnaires) covering all professional and technical staff involved in health care, to forecast manpower requirements to meet defined planning objectives, to suggest measures to ensure that existing manpower resources are used effectively, and to liaise with groups involved in the recruitment, training and deployment of health manpower.

4. A workshop on medical manpower was held in 1976 to examine the existing situation, to develop an integrated plan and to advise on the information systems and studies needed for such planning. The workshop prompted interest in the broader aspects of health manpower planning and subsequently there were similar exercises on nursing and community medicine.

5. The output of most health worker training programmes has increased in recent years so that New Zealand's problems are shifting to distribution (geographical and in certain health specialties) rather than to numbers. Also the "brain drain" which was previously a serious problem shows signs of lessening with the increasing availability of postgraduate medical education and apparently greater numbers of health service personnel throughout the world. In looking at the potential roles for health personnel, emphasis is now on encouraging team work and on the use of allied health professionals in the community.

Planning and administration

6. In the absence of formal planning systems, in the past health has been subject to cyclical political initiative and professional and public pressures. However, although the need for a philosophical approach and for the definition of both long and short term objectives are recognised, it has become clear that, without an organisational structure which ensures that planning, setting of objectives and the evaluation of progress can be carried out, the problems of New Zealand's health system will continue to be tackled from the fire-fighting perspective.

7. To these ends, a Special Advisory Committee on Health Services Organisation has been established to consider and advise on total health services. Very broadly, it is hoped to develop a service with options acceptable to both major political parties and sufficiently flexible to allow desirable innovation and change. It is proposed that there be a decentralisation of authority with the retention of strong central guidance, that popular support be mobilised by ensuring greater community knowledge of and participation in health planning, that health administrators be recruited and trained and be given scope to exercise their expertise.

8. A pilot scheme for a reorganised and decentralised health service is already under way. This involves the establishment of a health board, with elected and appointed members, responsible for ensuring the provision of public-funded health services to (and defined by) the area concerned but also working within national guidelines. The management of the public sector services will be provided by a small group using group decision-making (where appropriate) and involved in the actual health care delivery. Each main type of health care service will have a service development group, chosen from the providers of that service, to plan its development taking into account its public, voluntary and private components. Means of ensuring wider community participation in the scheme are being investigated. The area health board itself will study plans and recommendations, taking account of national guidelines, and will allocate its own priorities.

National support

9. In 1976 the Task Force on Economic and Social Planning reported on the need for planning, trends and influences to be considered and mechanisms to be used on a nationwide scale. This report led to the establishment of the New Zealand Planning Council, with steering committees on economic efficiency and flexibility, regional planning and development and social and cultural development (which includes health). In general terms it is the council's function to initiate a process of widespread consultation in order to formulate plans for the economic, social, cultural and environmental development of New Zealand. Its major aim is to help co-ordinate planning in the government, local authority and private sectors and to advise on medium-term and policy options. The findings of other advisory, planning and development committees at government and other levels affect health planning to a greater or lesser extent and these are necessarily considered in reaching decisions on health planning and development.

10. Health planning and administration is particularly susceptible to movements inherent in a cyclical political system and to variations in the economy. The structure of and emphasis on health services in New Zealand has been closely studied under both the major political parties and the structure presently evolving is based on the results of these studies and the aim for wider community involvement.

28 September 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Ghana

That the system of health care delivery inherited from colonial powers and those currently used in the richer and developed countries are not appropriate to local conditions is well recognised in Ghana. There are therefore projects centred at Danfa Health Centre near Accra, being conducted by the University of Ghana Medical School in collaboration with the University of California, Los Angeles, and in the Nkoranza/Techiman and Wenchi Districts, being undertaken by the Ministry of Health in collaboration with the World Health Organisation, to develop low-cost primary health care delivery systems most appropriate to local conditions in Ghana. Both projects are focused on the development of rural health care delivery systems that ensure maximum population coverage in general and community participation in the solution of local health problems in particular.

Health manpower training policies

2. There is at present nothing that one could describe as a national health manpower policy or health manpower development programme. However, in the light of the unmet current health needs of the population and the need for the development of alternative approaches to the strengthening of health services, a task force has been established to study the health manpower problems and to submit its findings together with appropriate recommendations for the formulation of health manpower policies and a health manpower development programme. It is envisaged that the task force will complete its assignment by the end of November 1977.
3. In this regard, it is perhaps worth mentioning that the Institute of Development Studies at the University of Sussex has recently concluded some studies in primary health care in Ghana in collaboration with the Ministry of Health and the Institute of Statistical, Social and Economic Research of the University of Ghana. It is envisaged that the findings of the studies will have some influence on future health manpower policies, particularly in the field of primary health care.
4. The need for self-reliance in health manpower development is fully recognised. The Ministry is consequently pursuing policies and measures that will promote the achievement of this objective. Training programmes are therefore being developed locally and expanded to promote the training of adequate numbers of the right type of personnel required for the effective and efficient delivery of health services. All categories of nurses, including nurse educators, are now trained in the country. Specialised post-basic nursing training programmes (e.g. for theatre nurses, ophthalmic nursing, nursing administration) are also being developed locally. In order to get these training programmes properly organised, key personnel are selected and sent to train outside Ghana as trainers.
5. The School of Medical Sciences of the University of Science and Technology, Kumasi, plans to train not only doctors but other health professionals like microbiologists, biochemists and medical entomologists as well. There is also a programme for the training of public health engineers in the same university; this programme is receiving WHO support.
6. For doctors, the University of Ghana Medical School has initiated post-graduate medical education and training programmes in collaboration with the Ministry of Health. Currently, the programme is restricted to the fields of general surgery, general medicine, paediatrics, and obstetrics and gynaecology. The first part of the programme is done in Ghana and then the students proceed to Britain to complete their training. It is however planned to run the whole programme locally in due course, and to start training in community health and other disciplines

soon. A programme in dental surgery has also been started. Currently the students go to Nigeria and Britain for the rest of their studies after completing their pre-clinical studies locally. Here too, it is proposed to run the entire course in stages in Ghana as resources improve.

7. As part of the policy of self-reliance, technical co-operation with the English-speaking West African countries is being vigorously pursued. Thus training facilities are made available to persons from countries where facilities are lacking or inadequate.

8. In the search for alternative approaches for the strengthening of the health services particularly in the rural areas, serious consideration is being given to the training and utilisation of non-health personnel and also to the identification of new roles for health personnel. Thus a start has been made to use the traditional birth attendants for maternal health services. Health aides are being used on an experimental basis in one district. The roles of teachers, agricultural extension officers, community development staff and other field workers for primary health care are also being explored in one district. Whatever models and systems are developed and found appropriate will be replicated in other parts of the country.

Planning and administration

9. With the help of USAID, a National Health Planning Unit is in the process of development and it is proposed that as early as possible, similar units will be established in the regions of Ghana. From the experience and the lessons learnt from the establishment of the unit, it has become clear that a unit of the type being developed can succeed only if maximum emphasis is placed on the training of nationals in various aspects of planning and health services development, and also if maximum use is made of the services of local as well as external consultants with the requisite expertise. The need to establish the unit arose from a recognition of weaknesses in policy formulation, decision making, planning, implementation and evaluation of health programmes within the system.

10. Promotion of the strengthening of the capacities of the health services for the planning and management of programmes at all levels is therefore ranked very high in priority in the Five-Year Health Services Development Plan which is currently being implemented. This plan forms an integral component of a National Five-Year Development Plan due to be completed in 1980.

11. As part of the activities for strengthening the capacities of the health services for planning and management, short courses in administration for senior health personnel have been initiated in collaboration with the Ghana Institute of Management and Public Administration (GIMPA) and the West African Health Secretariat. In order to be able to properly evaluate the impact of these policies and measures, a system for monitoring progress towards these objectives is being developed.

12. The organisational structure and functions of the health services are also currently under review with a view to the development of health services administrative system most appropriate to local conditions.

National support

13. The Government fully realises the importance and inter-relationships between health and socio-economic development and therefore accords high priority to the health sector in the overall development plans. This has been achieved largely through the support of Commissioners (Ministers) of Health and the Ministry of Economic Planning. Support has been won largely through formal and informal discussions, meetings, consultations and exchange of views on various issues of national and international importance.

14. There is still however one thorny problem or obstacle to be overcome and that is the shifting of emphasis from curative and hospital-oriented services to health promotive and protective services, thereby arriving at a true and proper balance between curative, preventive and rehabilitative services. From the progress so far made, there is considerable encouragement that it will not be long before this problem is overcome.

28 September 1977

HEALTH MANPOWER PLANNING IN BOTSWANA

Background paper prepared by the Government of Botswana

Over the past decade since independence, health manpower has been receiving special attention in Botswana. It has been realised that planning to meet manpower needs must be done early. Hospitals can be built in months; it takes a decade to train a doctor. Throughout the world hundreds of unstaffed hospitals, unmanned sanitary posts and deteriorating water supply systems stand as monuments to dismally inadequate manpower planning. What is unique about professional medical manpower is that it is essential under all conditions for the protection of society's investment in all other human skills. Let a good engineer, a physicist, a wife, teacher or even a mother of small children fall ill or die and the nation has suffered a loss in its real wealth. In developing countries many deaths can usually be traced to the lack of a physician or one of the allied medical personnel. Thus the final answer to our questions is that medical manpower has a unique role in preserving society's investment in its future.

2. In the early years following independence, Botswana followed the past colonial practice of ad hoc training of staff. The training of nurses had been established in the country and was continued. Medical aides continued to be trained on the job. Doctors and other professionals were sent abroad, as in the past, for training.

3. Long before independence a cadre of health workers in Botswana called medical aides or dispensers were in use in the country. Documentary evidence states that the earliest were four African orderlies in 1925, before the advent of nurses. They performed nursing duties, dispensing and consulting patients. They operated in the small and remote villages. These medical aides largely acted as substitute for the doctor in some areas in Botswana. The available records show that from 1926 to the present time the doctor/population ratio has varied between 1:30,000 and 1:13,000, as shown in the following table:

Doctor/population ratio in Botswana: 1926–1976

Year	Population	No. of doctors	Doctor/ population ratio
1926	150,185	6	1:30,030
1936	262,756	12	1:21,896
1946	296,310	11	1:26,936
1956	454,098	15	1:30,273
1963	528,000	24	1:22,000
1964	546,000	26	1:21,000
1965	559,000	23	1:24,310
1966	580,000	21	1:27,619
1970	648,000	27	1:24,000
1976	725,500	54	1:13,435

Source: Figures extracted from Botswana Annual Reports and WHO Statistics Annual

4. In 1970 the Botswana Government set itself a target of one doctor per 14,000 of population by 1975. From the foregoing it is obvious that we do not have a sufficient number of doctors to perform the duties they are supposed to perform at present. The question we are faced with is: is it possible to arrange for some other member of the health team to take over this responsibility?

5. This contention is further strengthened by the fact that a closer look at our out-patient department attendances shows that on average the bulk of them are for minor attendances which could easily be handled by auxiliaries or health assistants. This would mean that the doctor would see only those cases which he would deal with effectively and where his skill could be suitably used, the rest having been screened off and dealt with by a medical auxiliary able to refer back to the doctor when necessary.

6. In accepting such a principle we have the idealised structure of our manpower likened to a pyramid in which a relatively small number of highly trained professionals are supported by a large number of middle-level health workers, who in turn rest on a larger base of trained auxiliaries and other personnel.

7. In doing this we appreciate that the volume and quality of health services produced depend on the efficiency with which doctors work rather than on the total numbers, and that the focus in our planning must be on what is done rather than who does it. The question to be asked is not "How many doctors are necessary to meet the nation's health needs?" but "How many nurses, technicians and auxiliaries are necessary to make the nation's doctors optimally effective?"

8. This principle is being carried into the nursing field as well. Accelerated Rural Development of 1972 saw the expansion of health services into the rural areas. Targets were set to erect 180 health posts and 90 clinics by 1978. Staff development and training had to keep pace with this expansion.

9. In addition to the already-established training programmes for registered nurses, midwifery training, enrolled nurse training, health assistants, dental therapists, and nurse anaesthetists, Botswana is planning to embark on the following new courses of training in the future.

Public health nurse training

10. This programme commenced in 1970 and to date 17 public health nurses have been trained in Botswana. This, however, is far short of the target of 120 public health nurses required to man our clinics, health centres and hospitals; at this rate it will take a long time to reach our targets. The Government therefore feels that the only way to obtain the required number of public health nurses is to train them locally in conjunction with the University.

Nurse tutor training programme

11. This programme was commenced in 1969, but it has proceeded at a snail's pace for the following reasons. At first there were no nursing candidates with a Cambridge background who could enter universities for nurse tutor training. Lately, although there are now a good number of nurses with Cambridge qualifications to enable them to undertake this training, it has proved extremely difficult to procure places for these candidates in neighbouring countries as these also require tutors of their own. We have been sending one nurse a year to the University of Nairobi since 1969. All told we have four tutors who have qualified from Nairobi, two are at present studying in Nairobi and four more are studying in the United States.

12. The demand for tutors in Botswana has increased. The National Institute and the four enrolled nursing schools are being extended because of the large number of nurses required by the country. At present we have 16 established posts for tutors on the N3 scale, but only three are held by Botswana. We have forecast a need for 25 tutors by 1981. This target could never be reached at the rate of one a year sent to the University of Nairobi. The Ministry has had discussions with University authorities and Ministry of Education to admit nurses to the School of Education as from 1974. These girls will follow a B.Ed(Nursing) course lasting three years. The annual intake will be ten.

Family nurse practitioners

13. In development of the sentiment expressed earlier — what is important now is not the post but who can be trained to do the work — plans are afoot in Botswana to commence a course for family nursing practitioners. The course will prepare nurse graduates to evaluate the patients' health needs, diagnose health problems, seek solutions to health problems, plan health care, implement the care through treatment and evaluate the success and or failure of the care given. Successful candidates will be posted to clinics, health centres and out-patients departments of hospitals. This, we hope, will give nurses added skills in diagnosing and treating patients. This decision was taken following the realisation that our nurses are already running most of the clinics and health centres in the country and are assisted by periodic visits of doctors. They are therefore taking on the tasks of doctors.

Dental nurse tutors

14. An agreement will shortly be signed between our Government and USAID involving the training of dental nurse tutors. These tutors will be used to train dental therapists in sufficient numbers for the country's needs. A small number of dental therapists (at present two) are currently being trained every year. The dental therapists are currently employed mainly in preventive work in children. They provide preventive and promotive health care, diagnose dental problems early and initiate treatment.

Health administration and planning

15. At present the bulk of administrative work in Botswana hospitals is handled by matrons and medical officers in charge. They are assisted by clerical or executive officers who are experienced in medical administration, but no formal training plans have reached an advanced stage for training in hospital administration. Initially, this training will now be carried out in conjunction with the Institute of Development Management and will prepare candidates for a diploma, the course lasting a year. The candidates will be chosen from our present cadres of higher executive officers and school leavers with the Cambridge certificate. It is hoped that candidates will also come from Swaziland and Lesotho.

Family welfare educators

16. This cadre of worker has been experimented with in Botswana since 1970 and their function has been mainly educative. The Botswana Government Paper on Rural Development in Botswana states: "By the increased use of such auxiliary personnel resident in the villages, it will be possible to establish community-based health care, with a continuing relationship between the providers of health care and their clients". These family welfare educators are chosen by the villagers themselves, so that the women who come for training are known and respected by the people of their home villages, to which they return after a 12-week training course. The applicants must have had primary school education and must be mature.

17. Initially the training received by family welfare educators consisted of short four to five-day courses on the following topics:

- (a) family welfare (social and welfare aspects) — housing, home economics, community relationships, nutrition, baby care and the family as a unit;
- (b) principles of community development work — skills, personal relationships, co-ordination of efforts, and the community development officer as planner, supervisor, teacher and co-ordinator;
- (c) family planning and national development.

This was supplemented by a monthly course on:

- (d) the family and its welfare — home, children, immunisation, education;

- (e) the family and nutrition – balanced feeding, good cooking, breast feeding;
- (f) human reproduction and family planning – anatomy and physiology, gestation, family planning.

18. The purpose of this training is to achieve some of the objectives outlined. The general ignorance of the majority of the people about sound health practices causes much unnecessary hardship and many avoidable illnesses, and seriously restricts their capacity for work. In particular, there is a great need for education in sanitation, family planning, ante-natal care, child care and nutrition. It is considered an educational and motivational training exercise, to create a better understanding of health, and also of the soundness of family planning, demonstrating its relationship with various aspects of living (social, health, economic).

19. Family welfare educators, as their name implies, educate people on family welfare in general. Thus they are instructed on a wide variety of topics. They are taught nutrition, health education, communicable diseases, homecraft, first aid, public health, gardening and poultry keeping, community development and development studies.

20. After completing their training the family welfare educators are posted to villages where they operate from health posts. Here they make home visits for malnourished children, tuberculosis cases and family planning clients. Some give cooking demonstrations during home visits and give general advice. Some also visit schools, hospitals and women's groups.

21. Two in-service courses are held each year for all family welfare educators. Initially these were conducted at the central training centre, Denham, but in recent years they have been arranged regionally.

22. The yearly intake for training of welfare educators has been increased from 60 to 90. There are 300 family welfare educators in the country at present.

23. Family welfare educators have been accepted by all health workers in Botswana. Initially, however, there was some resistance on the part of some professionals who were sceptical of their value and also a feeling of resentment that this new cadre would perform some of the tasks that were traditionally performed by professionals. This has happily changed and the public are clamouring for the training of increased numbers of family welfare educators. With the advent of the concept of primary health care another look is focused on family welfare educators with a view to broadening their scope.

28 September 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the British Government

Effective delivery of health care requires a framework within which communication and collaboration between the health professions and the necessary supporting services can be achieved. The nature of the framework may vary from a wholly government-managed organisation to one which is wholly in the private sector. This note reflects the arrangements which exist in the United Kingdom where, despite the existence of some private provision, facilities generally are provided by the National Health Service (NHS).

2. When the NHS was established in 1948 it inherited not only a very mixed stock of hospitals but also traditional principles of organisation and practice formed over generations. Some of the old hospitals have since been replaced, many are still in use. Some of the traditions still stand, others have been questioned, modified or even overturned. One underlying principle which has not been affected, and which is not peculiar to the UK, is the tradition of clinical freedom, the principle that a doctor's duty is to secure for his patient the treatment which his clinical judgement determines will best serve the patient's needs. Another is a well established view of the role and function of each profession, and of each category of supporting staff, working in the health service. Systems of management and of planning must be sensitive enough to cope with the task of reconciling deployment of resources, which are never equal to all the demands upon them, with the expectations of the public and of the professions.

3. While the NHS is a national service, health care needs are not uniform throughout the country. Systems of management, of planning and of resource allocation need to take account of local conditions and local interests. From 1948 until 1974 the NHS had three constituent parts – hospital services managed by Regional Hospital Boards and local Hospital Management Committees, community health services provided by local authorities, and general practitioner services, medical, dental, pharmaceutical and ophthalmic, provided by members of the health professions in an independent contractual relationship with local Executive Councils. Reorganisation of the NHS in 1974 was designed to integrate its three parts, so as to improve communication between them and make possible more comprehensive planning of the use of resources and to establish a structure which would facilitate co-operation with related services provided by local government (which was reorganised at the same time in England and Wales).

4. These considerations led to the establishment of a system of management by regional and area health authorities, including members of local authorities, served by teams of officers drawn from the main health service disciplines who, at official level, manage by consensus, and supported by an extensive web of professional and staff advisory committees and by community health councils representing the patients' viewpoint. Family practitioners remain in an independent contractual relationship with Family Practitioner Committees established by area health authorities.

5. The system of planning within the NHS needs to involve a wide range of interests at local and regional level and to provide a means by which national policies and priorities can influence regional and local planning decisions while local and regional views of what is desirable and practicable can in turn influence national policies. The central department accordingly issues annual planning guidelines setting national policies and priorities within stated resource assumptions. The regional authorities give guidance similarly to their area authorities who review and bring up to date at least once every four years strategic plans and prepare annually rolling three-year operational plans. Regional authorities in turn submit regional strategic plans to the centre and each year prepare a planning report reviewing progress towards their strategic goals. The central department discusses these plans and planning reports with the regional authorities, monitoring both response to national policy guidance and progress towards objectives. It also takes the regional strategic submissions and planning reports into account in reviewing its planning guidance.

6. Expenditure on the health services is planned in the Government's annual review of the total public expenditure programme over a five-year period and allocations are confirmed annually. In recent years almost 11 per cent of public expenditure — just under 6 per cent of GDP at factor cost — has been for this purpose. Nearly one quarter of this allocation is taken up by contractual expenditure on family practitioner services, the running costs of special hospitals and other centrally financed services. The remainder is allocated to regions and areas for hospital and community health services on an objective assessment of relative need which takes account of population structure weighted by national rates of use of particular services by each age and sex group modified by standardised mortality ratios. History has left a very uneven distribution of health provision which the Government is committed to repairing as quickly as is possible without damage to important existing services. Planning is accordingly directed at rationalisation and geographical redeployment of services, as well as at redeployment of resources, to meet changing needs as the age structure of the population and the pattern of morbidity changes and as new developments take place in techniques of prevention or treatment.

7. Redeployment and rationalisation of services, particularly where they require closures of health facilities, affect both the careers of staff and the convenience of patients. This is recognised in the very full procedures for consultation with staff and local interests which are laid down for strategic plans generally and for proposed closures in particular.

8. A Royal Commission on the National Health Service, appointed in 1976, is studying the best use and management of the financial and manpower resources of the Service.

9. Standards and content of medical and nursing education are determined by the professions through the General Medical and General Nursing Councils. The scale of provision of training is determined in the light of forecast needs and resources, including the need to provide training and experience for doctors and nurses from other countries and the need also to reduce the dependence of the NHS on staff from overseas. Administrative and clerical staff numbers have in recent years expanded in considerable measure to relieve medical and nursing staff of duties for which their skills are not required. New roles are developing particularly for nursing staff, for example in primary care and family planning.

10. The Government, despite the financial constraints of recent years, has continued to increase in real terms the funds allotted to the NHS and is well aware of its special needs. Ministers have encouraged the Service for its part to seek out every possible way of securing better value for money in the use of the funds allotted.

25 October 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Canada

An introduction to background papers prepared by the Government of Canada is contained in document CMC (77) Gen/1.

HEALTH MANPOWER TRAINING POLICIES

2. Canada's health manpower training policies are described in the background paper prepared for Agenda Item IV: The role of Health Ministries and medical schools, issued as document CMC (77) IV/B5.

PLANNING AND ADMINISTRATION

3. It is important to keep in mind that most aspects of health care in Canada are within provincial, rather than federal, jurisdiction. A "national" health plan is, therefore, a somewhat inappropriate concept in this country, since a true "national plan" would have to be a composite of ten provincial plans, with the addition of federal objectives.

4. Nevertheless, the Royal Commission on Health Services in Canada (1964) provided a conceptual basis for health services in Canada which probably represents fairly well the objectives of most provinces.

Health Charter for Canadians

5. Part of the report was its "Health Charter for Canadians":

"The achievement of the highest possible health standards for all our people must become a primary objective of national policy and a cohesive factor contributing to national unity, involving individual and community responsibilities and actions. This objective can best be achieved through a comprehensive, universal Health Services Programme for the Canadian people,

IMPLEMENTED in accordance with Canada's evolving constitutional arrangements;

BASED upon freedom of choice, and upon free and self-governing professions and institutions;

FINANCED through prepayment arrangements;

ACCOMPLISHED through the full co-operation of the general public, the health professions, voluntary agencies, all political parties, and governments, federal, provincial and municipal;

DIRECTED towards the most effective use of the nation's health resources to attain the highest possible levels of physical and mental well-being.

- (1) "Comprehensive" includes all health services, preventive, diagnostic, curative and rehabilitative, that modern medical and other sciences can provide.
- (2) "Universal" means that adequate health services shall be available to all Canadians wherever they reside and whatever their financial resources may be, within the limitations imposed by geographic factors.
- (3) "Health Services Programme" consists of legislative enactments and administrative arrangements to organise comprehensive universal health care including prepayment arrangements for financing personal health services introduced in stages. Such a programme will provide complete health care with due regard to human factors and the spiritual, social, economic and regional forces intrinsic in the Canadian way of life.
- (4) "Canada's evolving constitutional arrangements" take into account the primary jurisdiction of provincial governments with respect to health matters including staging, scope and administration of health services, as well as the necessity for federal financial assistance to enable each of the provinces to implement a comprehensive, universal Health Services Programme.

- (5) "Freedom of choice" means the right of a patient to select his physician or dentist and the right of the practitioner to accept or not to accept a patient except in emergency or on humanitarian grounds.
- (6) "Free and self-governing professions" means the right of members of health professions to practise within the law, to free choice of location and type of practice, and to professional self-government. With respect to "institutions" it means academic freedom for medical, dental and other professional schools, and for hospitals, freedom from political control or domination and encouragement of administration at the local level.
- (7) "Prepayment arrangements" means
 - (a) financing within a province by means of premiums, subsidised premiums, sales or other taxes, supplements from provincial general revenues; and
 - (b) by federal grants taking into account provincial fiscal need.
- (8) "Full co-operation" means
 - (a) the responsibility of the individual to observe good health practices and to use available health services prudently;
 - (b) the responsibility of the individual to allocate a reasonable share of his income (by way of taxes or premiums or both) for health purposes;
 - (c) the methods of remuneration of health personnel – fee-for-service, salary or other arrangements – and the rates thereof should be as agreed upon by the professional associations and the administrative agencies and not by arbitrary decision, with an appeal procedure in the event of inability to agree;
 - (d) the maintenance of the close relationship between those who provide and those who receive health services, safeguarding the confidential nature of that relationship;
 - (e) the provision of educational facilities of the highest standards and the removal of financial barriers to education and training to enable all those capable and desirous of so doing to pursue health service careers;
 - (f) the adequate support of health research and its application;
 - (g) the necessity of retaining and developing further the indispensable work of voluntary agencies in the health care field;
 - (h) the efforts to improve the quality and availability of health services must be supplemented by a wide range of other measures concerned with such matters as housing, nutrition, cigarette smoking, water and air pollution, motor vehicle and other accidents, alcoholism and drug addiction;
 - (i) the development of representative health planning agencies at all levels of government, federal, provincial, regional and municipal, and integration of health planning."

A new perspective

6. A decade later another important Federal Government statement on health care policy, "A New Perspective on the Health of Canadians" (1974), reflected the advances which had been made in achieving the goals embodied in the "Health Charter for Canadians" and also a new perspective on the relative merits of various approaches to further improving the health of Canadians. That working document noted:

"The evidence uncovered by the analysis of underlying causes of sickness and death now indicates that improvement in the environment and an abatement in the level of risks imposed upon themselves by individuals, taken together, constitute the most promising ways by which further advances can be made.

Accordingly, it is the intention of the Government of Canada, first, to maintain at a high level the services and support provided through its present activities in health protection, research and the financing of personal health care. To these will be added measures directed at specific national health problems, chosen in consultation with provinces, consumers, professions and associations according to their gravity and incidence, and aimed at removing or reducing the factors underlying sickness and death.

Some of these measures in time will no doubt be directed at environmental factors, others will be directed at lifestyle risks, still others will expand the horizons of health research, and yet others will encourage more personal care services to neglected parts of the Canadian population. In every case the measures will be based upon the expressed interest and concern of all those who contribute to the health of Canadians, including in particular the people themselves.

Since direct health care is already consuming some seven per cent of the wealth that Canadians produce annually, it is evident that the rate at which the Government of Canada can expand its activities in the field of health is severely limited by financial considerations. It is also true that measures directed at the prevention of illness will take some time before they are translated into savings in the costs of providing curative health services.

These two factors make it imperative that the measures developed in consultation with provinces, professions and associations be chosen with great care, and with due regard for the costs and benefits that

can be anticipated. In choosing the measures, consideration will be given to a number of factors, among which will be:

- (1) the gravity of the health problem;
- (2) the priorities of those who share in decision-making;
- (3) the availability of effective solutions, results of which are measurable;
- (4) the costs involved; and
- (5) the multiplier effect of federal initiatives in marshalling and accelerating support from all those who make vital contributions to raising the level of health or who have a key role in controlling the cost of health services.”

7. In addition to these federal reports, most provinces have produced one or more “policy papers”, “plans” or “task force” reports which essentially constitute a “health plan” for the province, and generally these documents are conceptually in harmony with the objectives described here.

Regionalisation of health service planning

8. As noted in the introductory paper, the responsibility for health planning in Canada lies mainly with the provinces. Perhaps the most controversial current “trend” in health services planning is that of regionalisation of planning and/or management of services.

9. Most health policy-makers in Canada agree that crucial decisions about health care delivery should be made at the regional or community level, with the emphasis on meeting the needs of a geographic area (usually one containing at least 100,000 people). In theory this approach would result in:

- (a) better co-ordination – since the possibilities for melding the various components should be greater when carried out at the community level than when attempted by provincial ministry head offices hundreds of miles away;
- (b) better identification of specific local needs;
- (c) more appropriate health promotion and prevention programmes – since needs vary greatly (e.g. highly industrialised communities versus rural areas);
- (d) better rationalisation of system – local people better able to judge appropriate priorities when economic constraints are necessary;
- (e) greater acceptability of decisions to community.

10. Despite all of these conceptual advantages, regionalisation of planning has been difficult to achieve. Wherever it has been tried it has so far failed to meet expectations. There have been great difficulties in determining *how* to organise a regional body: the appropriate “catchment area” is often difficult to determine, since it may cross municipal and even provincial political boundaries; the question of how such bodies should be chosen has been difficult – with both appointment and election processes apparently being fraught with problems; the question of how the bodies should be staffed has not been resolved; and it has proven difficult for provincial ministries to actually decentralise *decision-making*, so that regional planning bodies continue to be *advisory* bodies only. The momentum of the existing system is so great that it is very difficult for *any* group to influence it – much less one with no financial authority.

11. It appears that if existing regional planning bodies are to become more effective and the process is to be extended, they must be more adequately staffed and must be provided with an adequate information base for long-term planning and resource allocation.

Review of health services administration

12. The most detailed review of the administration of health services in Canada was undertaken in 1969. This review was commissioned by the Conference of Health Ministers of Canada and its report was entitled “Task Force Report on the Cost of Health Services in Canada”. Despite its title, the report dealt with many administrative issues beyond simply the costs of care and many of its 337 recommendations for improvements in the administration of services were directed to efficiency, effectiveness and responsiveness of the services to patients’ needs.

13. That extensive review and others which have been undertaken, both nationally and provincially, have described so many deficiencies that it would be impossible to enumerate them all. Fortunately, most of them are relatively minor, and there are concerted efforts everywhere to improve the efficiency of the administration of services. The more significant deficiencies which have been identified include:

- (a) while 300 beds is generally considered to be the minimum size for efficient hospital operation, 62 per cent of general hospitals have less than 100 beds. Moreover, the smallest hospitals often have very low occupancy rates (this problem is extremely difficult to resolve where small hospitals are serving rural communities);
- (b) over-utilisation of general hospitals (resulting, in part, from over-supply);
- (c) insufficient centralisation of services such as laundry, meals services, laboratories;
- (d) unnecessary utilisation of diagnostic tests;
- (e) inadequate supply of well-qualified managers for health care programmes;
- (f) information systems which are inadequate for planning and management purposes;
- (g) less than one-half of communal water supply systems are fluoridated.

14. Revisions considered appropriate include:

- (a) positive incentives (mainly financial) to communities to substitute more appropriate types of services for acute hospital care;
- (b) continued constraints on hospital construction and limitation of highly specialised programmes and diagnostic equipment to tertiary hospitals;
- (c) incentives in hospital budgets designed to increase productivity;
- (d) education of physicians *and public* to make more appropriate use of diagnostic tests;
- (e) mandatory fluoridation of community water supplies;
- (f) expansion of occupational health services.

15. Clearly these strategies are only a small selection from the many which might be employed to improve the organisation and administration of Canadian health services. These strategies have been implemented to a greater or lesser degree in various provinces, have proven to be at least partially effective, and are politically and economically feasible in most, if not all, provinces. Taken together, along with the recommended improvements in health manpower policies, they would, over time, lead to substantial improvements in our health services.

NATIONAL SUPPORT

16. Canadians spend approximately seven per cent of their GNP on health care. Clearly it rates as one of their highest political priorities at both federal and provincial levels. The extensive health insurance programmes and the large supply and broad range of services available are indicators of the high level of support for health programmes. Recent opinion surveys have also indicated a high degree of public satisfaction with their health services.

October 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Sri Lanka

In Sri Lanka the state assumes the responsibility of providing health care to the people and has adopted a very liberal policy with regard to the development and expansion of the health services throughout the country.

2. The responsibility of providing health care to the people lies with the Ministry of Health, through its two departments:
 - (a) the Department of Health Services – providing services based on the Western system of medicine;
 - (b) the Department of Ayurveda – providing services based on the indigenous traditional system of medicine.

Department of Health Services

3. The Department of Health Services, headed by the Director of Health Services, functions through three fairly independent sub-systems under three deputy directors:
 - (a) the medical services;
 - (b) the public health services; and
 - (c) the laboratory services.

Additional deputy directors are charged with the functions of general administration and planning. Several technical and non-technical assistant directors assist the deputy directors at central level.

4. Since 1954 the administration of this department has been decentralised with a view to securing the maximum efficiency at a minimum cost, and bringing the administration closer to the officers at the periphery. Accordingly, sixteen health divisions in the charge of superintendents of health services have been established. The superintendents of health services are responsible for the co-ordination of the curative and preventive services in their divisions.
5. Through the years, the curative and the preventive services have developed as two separate and distinct divisions, supported by the laboratory and other ancillary services, with integration at various levels.
6. The medical services, representing the largest part of the government Western sector, meet the demands of the population for medical care through a network of medical care institutions ranging from provincial hospitals, base hospitals and district hospitals to peripheral units, rural hospitals, maternity homes, central dispensaries, branch dispensaries and visiting stations.
7. The delivery of public health services to the community is through a network of 102 health units in charge of medical officers of health. These units are further divided into 770 ranges of public health inspectors (PHII), averaging eight PHII per health unit, and 2277 public health midwives (PHMM) areas, averaging 23 PHMM per health unit. Thus the basic working units in public health are: the PHMM areas for family health and the PHII ranges for environmental sanitation and the control of communicable diseases. The peripheral organisational unit of the public health services is the office of the medical officer of health.

Department of Ayurveda

8. The Department of Ayurveda, directed by the Commissioner of Ayurveda, is supplementing the existing allopathic system. The Government of Sri Lanka gives encouragement to the development and expansion of the indigenous or ayurveda medical system. In addition to the paid services given by over 8,000 registered ayurvedic practitioners in the private sector, free indoor and outdoor treatment is provided at the ayurveda teaching hospital, Colombo, and five other ayurvedic hospitals situated in various parts of the island. Outdoor treatment only is provided at four government ayurvedic dispensaries and at 252 ayurvedic dispensaries managed by the local authorities with grants received from the central Government. An ayurveda research institute functions at Nawinna to undertake clinical, pharmacological and literary research. The ayurveda system is being further developed on three main fronts, medical treatment, medical education and medical research. The college for ayurveda training has been recently raised to university status. The siddha system of medicine, which is one branch of ayurveda system, will be taught at the siddha college in Jaffna, and the other sub-system, unani, in Batticaloa, which are the main areas for practice of these sub-systems.

9. The ayurveda manpower is being developed further on a systematic training programme basis, and action is being taken to register the unregistered ayurveda practitioners who would be eligible for registration. There are about 6,000 unregistered ayurvedic practitioners in Sri Lanka.

Planning and administration

10. The national five-year plan for socio-economic development includes a section declaring the intentions of the Government to improve the delivery of health services of the government sector. This forms the basis of the national health plan which provides for well-defined objectives and targets.

11. The function of planning is the responsibility of the planning and programming division of the Ministry of Health. From recent times the annual programming of the health services has been carried out according to the planning, programming and budgeting system (PPBS), which is believed to be a step towards rational health planning. Monitoring of progress towards defined objectives is effected by monthly and quarterly evaluation of programmes in terms of input/output analysis. There is, however, a need for identifying programmes and projects on a more rational basis than on the basis of the present administrative structure of the Ministry of Health.

Priority health problems

12. It has been determined that the priority health problems in Sri Lanka require an easy access of the population to the following basic health services:

- (a) family health services, including basic family planning techniques, ante-natal, natal and post-natal care of mothers, care of infants and pre-school children, including immunization and nutrition;
- (b) control of leading diseases, many of which are largely dependent on environmental factors;
- (c) basic medical care services which provide for referral of patients, where necessary, to better equipped hospitals.

13. None of the health care units in the existing health care system, based on independent systems providing curative and preventive services, provides services related to all three problem areas – family health, disease control and delivery of medical care; a great majority of peripheral medical care units (peripheral units, rural hospitals, central dispensaries etc.) are not concerned with the control of communicable diseases and few deal with family health problems; larger hospitals only offer treatment services for communicable diseases and are not concerned with primary prevention; no medical care is provided through the public health services; and ayurvedic practitioners do not participate in preventive health activities. In addition the selective utilisation of different health care units is prevented due to lack of an established referral system; as a result some of the larger institutions are over-utilised and smaller ones under-utilised.

14. The growth of the health delivery system in its present form, with lack of integration of the curative and preventive functions and the utilisation of personnel in inappropriate roles is unlikely to improve the provision of health services as it requires more resources than the country can afford. Several alternative measures have been suggested in order to adapt the present health care system to the requirements of the present and future priority concerns. These include:

- (a) the establishment of integrated health care units which will carry out basic health functions, both curative and preventive, under the guidance of qualified doctors working in integrated district hospitals and peripheral units – this would entail the training of doctors to undertake a new role with a public health bias;
- (b) the development of integrated central dispensaries functioning under the leadership of an assistant medical practitioner (a medical auxiliary) – these officers presently undertake only curative duties;
- (c) the utilisation of the public health midwife, who is the most peripheral worker in the present system, to perform all three basic functions at a level corresponding to her training, assisted by doctors and other health personnel working in integrated hospitals and peripheral units; and
- (d) the utilisation of traditional ayurvedic practitioners to carry out some of the basic health functions, particularly those related to family health and disease control.

15. Some of the changes envisaged above in utilising the most appropriate personnel for the development of an integrated approach to the delivery of health care are already being effected. In this context assistant medical practitioners who performed only curative functions are now provided with training in public health with an emphasis on family health and disease control; the public health midwife, trained to provide domiciliary maternal and child care services, is providing a variety of services under the Family Health Programme; traditional ayurvedic practitioners are being utilised more and more in non-traditional roles and are trained to provide basic family health services and assist in disease control.

Manpower training

16. For the effective delivery of health care Government has provided programmes of training for all important categories of health workers. Except in the field of postgraduate training of doctors, there is a great degree of national self-reliance in the training of these personnel.

17. The Ministry of Education and the Ministry of Health are jointly responsible for training health personnel. The Ministry of Education is responsible for training medical graduates and dental surgeons at the two medical faculties of the University of Sri Lanka, which also assist in training assistant medical practitioners and pharmacists. The Department of Health undertakes the training of all other health personnel at the schools for nursing, medical laboratory technologists, radiographers, physiotherapists and school dental nurses training of other supportive personnel is undertaken at the large provincial hospitals.

18. Training of public health personnel is carried out at the Institute of Hygiene, where public health inspectors, public health nurses and midwives are trained. Doctors undertaking public health practice are also offered a short orientation course at this institute.

19. In the past, training of personnel has been strongly biased towards hospital-oriented medical care based on the British pattern. This was particularly so in the training of doctors where undergraduate training was of little relevance to the needs of the country, and postgraduate training provided abroad, mainly in the United Kingdom, in highly specialised skills and techniques was often not appropriate for our needs. This has resulted in the reluctance of doctors to work in rural areas where little opportunity is provided for the practice of skills in which they were trained, and in the emigration of doctors to the more affluent countries where their skills could be more usefully applied.

20. One of the acute problems facing Sri Lanka is the exodus of trained manpower. The problem is particularly pronounced in respect of doctors, and less so in respect of certain categories of para-medical personnel. Government health institutions today function with a shortage of about 500 doctors, despite the fact that the two medical faculties have an annual output of around 225 doctors. During the past seven years about 800 doctors have emigrated, and nearly 150 doctors continue to leave the country every year. It would seem that the annual output of doctors from the medical faculties would be inadequate to keep pace with the country's requirements if the present health delivery system is to continue without change. With a view to remedying this situation changes have been made in the curricula of the medical faculties with the aim of producing doctors to meet local needs. More and more emphasis is now given to community health practice rather than to hospital based medicine; and students are exposed to rural health practice and family health work in selected field practice areas. The ability to work within limited resources and as members of a local health teams are some of the objectives of community health training.

21. Steps have also been taken to establish an Institute of Postgraduate Medicine to undertake training in all major specialities. In addition to retaining the services of trainees during their period of training, it was expected that this institute would produce the type of specialist who would be appropriately trained for local needs. Unfortunately little progress has been made in commencing training courses, as the Boards of Study, comprising specialists trained abroad, have expressed reluctance to commence training, presumably due to lack of adequate facilities for training.

22. As mentioned earlier, it is increasingly recognised that the category of worker known as the assistant medical practitioner, who is accepted by the community, is competent to deliver basic health care and could be entrusted with the provision of such care, especially in the rural areas. These officers now work under the supervision of doctors in some of the larger hospitals but work quite independently in some peripheral units, rural hospitals and central dispensaries. Training of this category of worker, which lasted one and a half years, was discontinued in 1967 with the expectation that with the increased output of officers from the two medical faculties these officers could be replaced by doctors. For reasons mentioned already, this expectation was not realised, and the training course has now been revived with modifications to meet present needs. The curriculum now includes training in relevant aspects of community health work and lasts for a period of two and a half years followed by six months internship.

23. With the recognition of the possible role of ayurvedic practitioners in the delivery of basic health services, the Ayurvedic Medical College, which undertakes the training of personnel, has now incorporated some basic Western medical disciplines, as well as certain aspects of public health, in the curriculum of training. Most ayurvedic practitioners are, however, traditional practitioners without formal training and steps have now been initiated to provide basic training particularly in the fields of family health and the control of communicable diseases.

24. Some experience has recently been gained in the utilisation of rural volunteers in the implementation of the Family Health Programme. This activity was initiated mainly to complement the activities of public health midwives in their roles as basic public health workers. The response has been extremely encouraging and steps are being taken to expand this activity which will entrust voluntary workers living in the community to assist in the delivery of basic health care. The Government also proposes to recruit about 1500 community health aides, whose functions would be somewhat similar to the volunteer health workers. It is envisaged that this type of worker would work very closely with the community to give basic advice and health care. It is expected that they would acquire adequate competence to deliver primary health care after a short course of training lasting for three months in: the control of communicable diseases; health education; maintenance of simple vital statistics; family health; school health work; environmental sanitation; nutrition; elementary medical care; accident prevention; first-aid and rehabilitation.

National support

25. Health occupies an important position in the Government's overall development plan. The development and expansion of the health care services has resulted in a substantial increase in the government expenditure on health from Rs.108 million in 1955 to Rs.397 million in 1976; the per capita expenditure on health has increased from Rs.12.37 to Rs. 23.76 during the same period. The present public expenditure on health represents about two per cent of the GNP and about seven per cent of the total government expenditure. The emphasis, however, has been for the provision of the more expensive curative services; the proportion of health expenditure allocated for the medical services is about 70 per cent whilst that for the public health services is only 21 per cent. Though it has been shown that much of the morbidity and mortality can be prevented by strengthening the public health services, thereby reducing the need for increasing expenditure on the curative services, the emphasis on strengthening the curative services has continued through the years due to public demand for such services.

26. Taking into consideration the priority health needs of the country, the present Government has declared its intention of improving the standards of health care and disease prevention, particularly in the rural areas where 80 per cent of the population live, by utilising both Western and ayurvedic systems of medicine. To achieve this objective it proposes to adopt the following course of action:

- (a) improve the medical care services in the rural areas by making available qualified medical personnel, and modernising and improving existing medical care facilities to make available prompt and efficient medical attention;
- (b) place greater emphasis on the development of preventive health services;
- (c) enhance family health services including family planning services;
- (d) establish an auxiliary service of semi-skilled community health aides to offset the deficiencies in the present health care delivery system;
- (e) give greater recognition to the ayurvedic system of medicine by improving the existing ayurvedic hospitals and establishing ayurvedic hospitals in every district, establishing medical herbaria to produce medical herbs for the manufacture of ayurvedic drugs, and recognising the importance of the role of registered ayurvedic practitioners in the delivery of health care services in the country.

4 November 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Trinidad and Tobago

The health care delivery system in Trinidad and Tobago has as its objective the achievement of the maximum level of health by the population in the shortest possible time. Health programmes are therefore designed with this objective in view, but taking cognisance of the limitations of personnel, finance and hospital facilities. The system is dynamic and therefore subject to review, change and upgrading in all areas to provide a more efficient service to the population.

The present system: a brief description

2. The present health care delivery system consists of government health services, including general and specialised hospitals and health centres, supplemented by the private sector which provides mainly ambulatory care. The services provided by the Government are available practically free to the population. Private services are on a fee-paying basis.

3. There are four types of hospitals – general, county, district and specialist – which provide health services throughout the country. The largest general hospitals, besides providing specialist referral services, are also used as teaching hospitals of the University of the West Indies. The county hospitals provide short-term care, surgery, and medical and obstetric care. The district hospitals provide follow-up care treatment and geriatric care, and handle minor emergencies. In addition to the county and district hospitals, there are over 100 health centres located throughout the county. These health centres provide primary health care, delivered by either a physician or a registered nurse/midwife. Programmes executed in health centres include maternal and child health, family planning and immunisation, infectious diseases and general consultation.

4. At present the aim of the Ministry is to reduce the demand on the two general hospitals. This calls for the improvement and expansion of health facilities and manpower. The Ministry, in co-operation with the Inter-American Development Bank, has embarked on the construction of some 31 health centres and the World Bank is assisting in the construction of a new 100-bed maternity hospital. Seven new health centres, four with delivery units, have been completed and are in use in rural areas. A community health training centre has also been completed and is in use, and a new training school for professional nurses is also under construction.

Introducing change in health care delivery

5. The Ministry is aware that change is a function of the health system. It has therefore prepared itself to meet the challenges that emanate from changing health needs. In the light of this, the Ministry has placed emphasis on the extension of health care, with consideration being given to the economic and physical ease of attaining health care services, and the social accessibility of the services offered. Legislation has been enacted to allow the informal admission of mentally ill patients to psychiatric hospital and to facilitate the detention of acutely disturbed patients – yet preserving and ensuring the preservation of human rights and dignity. The upgrading of county and district hospitals is part of this philosophy of change. The upgrading and expansion of health care implies also the upgrading and expansion of manpower.

Health manpower training policies

6. Training of health personnel in the emerging para-medical fields, such as dental nurses, nurse practitioners and nursing assistants, is being carried out in addition to the traditional courses for nurses, public health inspectors and health visitors. A Medical and Dental Faculty is proposed for Trinidad and Tobago as part of the University of the West Indies, which will greatly expand our

perspectives, not only for training medical, dental and other categories of health professionals. The Government is also considering the establishment of a College of Health Sciences which will not only supply para-medicals for Trinidad and Tobago, but also for other West Indian islands.

Planning and administration

7. In Trinidad and Tobago there is a Central Planning Unit which co-ordinates the plans of the various parts of the public sector. The planning unit in the Ministry of Health is responsible for the formulation, supervision and implementation of projects. It serves as the secretariat to the ministerial committee which produces the national health plan. It is also responsible for the preparation and supervision of the current development programme of the Ministry.

National support

8. Health is an integral part of the national development plans. The Government has committed itself to the Ministry's health programme. The Ministry has received approximately seven per cent of the national budget for 1977. Popular support is mobilised for national health by using the resources of the media – e.g. newspapers, radio, television.

November 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Western Samoa

Western Samoa's health care delivery system was commenced under the German administration of the country, continued under the New Zealand administration since 1914 and was taken over by the Western Samoan Government on the independence of Western Samoa in 1962. In essence the health care delivery system is a socialised system, in which the patient pays a small fee for service and medicines and in which the cost of the system is otherwise fully paid for by the Government through taxation.

2. The Department of Health is headed by a Director, responsible to the Minister of Health, and supported by a Deputy Director and chiefs of the divisions of public health, nursing services, national hospital, dental services, administrative and pharmaceutical services. Health care is delivered to the population through a system of district health services, headed by a district medical officer who is responsible to the Chief of Public Health and who is supported by district (public health) nurses, (hospital) staff nurses, a health inspector and nurse aides. Patients are seen in district hospitals as in-patients and out-patients; maternal and child health and family planning services are delivered through the district nurses, supported by district hospital services. Special disease conditions (tuberculosis, leprosy and filariasis) are dealt with through specialist units responsible to the Chief of Public Health and field follow-up work is carried out by district nurses under the district medical officer.

3. Western Samoa's medical officers are trained abroad; the majority of present graduates have attended the Fiji School of Medicine and only a few have graduated from New Zealand universities. There is a possibility of specialisation in certain fields under the New Zealand bilateral aid programme, and some of the Western Samoa medical officers have gained a higher degree through examinations under the said scheme, as well as through fellowship awards from the World Health Organisation.

4. Nursing training is provided through the Western Samoa School of Nursing, a section of the Division of Nursing Services of the Department of Health. Most nurses in Western Samoa have graduated in the country; a few have received their training in New Zealand under the New Zealand bilateral aid programme. On their return these nurses are in line for supervisory positions. Nurse aid training is mostly on-the-job training that is frequently followed by persons who failed their nursing examinations.

5. Dental officers have received training in Fiji and specialty training in other countries (New Zealand, Malaysia and England).

6. Assistant health inspectors have been trained in Western Samoa itself, with the aid of WHO personnel. From this cadre, promising individuals are sent to Singapore for full health inspector training, leading to a health inspector's diploma.

7. Other paramedical (radiology, health laboratory) staff receive their training abroad although in-country on-the-job training is provided.

DEVELOPMENT OF HEALTH SERVICES

8. The relevance of the present services can be considered in the light of the demand expressed by the community; of the need as considered by the community; and of the need, as considered by the Department of Health.

Demand for health services expressed by the community

9. In essence the demand for health services was expressed by the community in Western Samoa through the building of district hospitals and doctors' and nurses' residences near the hospitals through community initiative and funds. The community, through their parliamentary representation, remain quite vocal about their desire to have a medical officer available in the district at all times. The demand for services continues through the building of sub-centres in the districts, which the community expect to be staffed with registered nurses.

10. A dichotomy exists in the minds of the community, who, although they have built the district hospitals, are reluctant to be in-patients in these hospitals (for a variety of reasons) and prefer to come to the National Hospital in Apia.

11. The demand for preventive services is not expressed, although women's committees have adopted the district nurses' work as their special area of cooperation and carry this out most effectively.

The need for health services expressed by the community

12. Naturally, the need for health services is expressed in the demand for health services as described above. The level of sophistication of the community has not yet gone beyond the demand for immediate satisfaction of righting health matters gone wrong. The demand for more sophisticated services – cosmetic, services for the blind, services for invalids, speech and hearing therapy and others – awaits awakening through health education.

The need for health services as expressed by the Department of Health

13. The Third Five Year Development Plan (1975-1979) for Western Samoa provides for action in the Health Sector to:

- (a) improve the quality of all preventive and curative health services in Western Samoa;
- (b) strengthen the national structure of health services delivery, to render access to preventive and curative health care on a more equal basis to both the rural and the urban populations;
- (c) increase the awareness and the participation of the Samoan people in health promotion activities;
- (d) enhance the productivity of local, and aid, resources applied to health sector development.

14. Western Samoa's health planners recognise, however, that serious constraints will exist through the planning period, and impede efforts towards Third Plan goals. These constraints include a continuing shortage of trained health manpower in all categories, as well as a lack of sufficient material and financial resources to move forward at a level of effort fully commensurate with health care needs. Moreover, the steadily increasing costs of major health care inputs – imported medical equipment and materials and training for high-level health manpower – coupled with the steadily growing demand for health services, make these constraints more critical every year.

15. Conscious of this situation, the Department is aware that to achieve real gains in the health sector its more efficient longterm strategy will be to:

- (a) emphasise development of low-cost primary level health care, utilising less trained staff and less elaborate facilities to bear the major burden of health service delivery;
- (b) develop more costly specialised secondary-level health care, including inpatient treatment and personal attention by physicians, but only in proportion to the growth in volume of health care problems that are identified at the primary level and are too complex to be dealt with at that level.

16. However, insofar as the Third Plan is concerned, it is clear that the on-going Western Samoa National Hospital development programme (the re-building of the old Apia General Hospital with

aid from New Zealand) must be the major immediate health sector development activity. Nevertheless, in view of the Department's long-term strategy, this heavy investment in sophisticated health infrastructure will at the same time be tempered by an effort to at least maintain present development momentum in other programme areas (rural health etc.) during the Third Plan, as well as to build a foundation for accelerated progress in the years beyond.

Discussion

17. Although stated in 1975, in essence these aims still stand in September 1977. The Department of Health is aware that strengthening of peripheral health services is urgently needed. The constraints, however, remain the same as mentioned above. Strengthening of services at the primary level, however, is taking place and primary health care workers, both for basic medical care and for childbirth services (TBA's), are being trained. The latter programme is in a further advanced state than the former, although the former has received a strong stimulus during a recent national primary health care seminar which has opened up avenues for nationwide debate in village councils and women's committees. It is clear that the concept of primary health care is very attractive to the Samoan community and there is no doubt that the programme will find substantial support from the community at large. Although definitive policy on primary health care workers has as yet not been decided upon by the Government, the pattern of training village workers, chosen by the community, remunerated by the community and supplied by the Government, is slowly emerging.

18. A further sign of recognition of the need for change has been the Government's decision to hold a country health programming exercise for Western Samoa, in which it is assisted by the World Health Organisation. The first phase of the exercise, situational analysis, was carried out during November/December 1976, and a revised report was handed to the Government in August 1977. During June/July 1977, the second phase, formulation of the plan, was carried out and the draft working document, containing the basic recommendations for changes in the departmental structure and services, was handed to the Government in August 1977 also. The Government is now studying both documents, and discussions on departmental and (in the future) cabinet level should result in a comprehensive plan for the health services in Western Samoa. It is envisaged that this plan will fulfil the requirements laid down in the Third Development Plan 1975-1979.

November 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS IN UGANDA

Background paper prepared by the Government of Uganda

Uganda, like many other former colonial parts of Africa was unfortunate in that when the first health care infra-structures were established in the country (mainly during the first quarter of the 20th century) they were hospitals and dispensaries catering mainly for curative or clinical disciplines. This became even more manifest when the first medical school was opened at the then Makerere College (now Makerere University) in 1923. Whereas all the major clinical and basic sciences disciplines were established right at the beginning, it was not until 30 years later (i.e. 1953) that the department of preventive medicine first came into existence. This then was the order of the day: treatment of individuals as they reported to medical centres.

2. With the establishment of the department of preventive medicine, a new horizon dawned on the health services of this country. Ugandans were sent to Britain for postgraduate training in public health, and at independence time there were several Ugandans with such qualifications to man the key administrative posts in the Ministry of Health headquarters and some of the administrative regions. Their impact on a re-orientation towards preventive services was however minimal. Even the first national five-year development plan lacked many crucial elements on prevention in the health sector. There was a considerable improvement on the second five year development plan with the erection of 23 new 100-bed hospitals and a commitment to the creation of one health centre per *gombolola* (sub-county), serving 6,000 – 20,000 population. This target still remains to date, but may not be realised soon owing to several constraints.

3. The introduction of a model comprehensive mobile national and child health service in Ankole District for the protection of the pre-school child was introduced with excellent results.

Third five-year development plan

4. The introduction of the third five-year development plan (1971/76) was even more encouraging, as greater emphasis was for the first time laid on preventive services than on curative services. The plan had as its main theme the prevention of diseases, better health care facilities and health promotion. The following services were listed as those on which considerable efforts and expenditure would be placed during the period: health education, maternal and child health, environmental sanitation, occupational health, communicable diseases control, medical care, and rehabilitation.

5. Meanwhile an important statutory step was taken with respect to vital statistics: the introduction of compulsory birth, death and marriage registrations, with the hope of obtaining more reliable data for health planning – a subject so much fraught with giving misleading results in most developing countries. Also, a commitment was made to provide medical records officers in all the country's major hospitals. Family planning became officially accepted by the Government.

6. The third plan also saw a new trend of looking at nutrition as a special subject warranting special consideration. Thus new nutritional rehabilitation centres were established in the country, to perform functions which had always been a prerogative of the main centre in Kampala (Mwanamugimu as it is known locally). Since nutritional diseases contributed to a high proportion of the 1–4 years age specific death rate (currently 40 per 1,000 population), the introduction of nutritional scouts at Kayunga (near Kampala) and Ibanda (in Western Uganda) during this period is evidence of a growing awareness that new approaches of tackling diseases at their root causes were necessary. The nutritional scouts mentioned are nothing but primary school-leavers who have been trained in their home villages in elementary principles of nutrition,

causes and simple signs of malnutrition, its prevention, and other common diseases usually associated with poor nutrition.

7. Meanwhile Kasangati Health Centre (Makerere University), established in 1959 for the teaching of community medicine, continued to provide useful health data as well as acting as a model health centre. It is remarkable that within its defined area infant mortality rate fell from 150–180 per 1000 live births to less than 30 (in 1976) over the years – an achievement indeed! Yet no replica of Kasangati health centre has ever been made in this country. It was erected and staffed with personnel which Uganda can ill-afford. Most of the demonstrations, and the number of staff, are what the young doctors or other medical personnel under training would never encounter during their future practice. The establishment for the Health Centre still stands as follows:

medical officer (resident)	1	midwives	6
administrative secretary	1	assistant health visitors	4
health visitor	1	nutrition assistant	1
nursing sister	1	record clerk	1
medical assistant	1	demographic scout	1
health educator	1	nursing aids	4
health inspector	1	laboratory assistants	2
health assistants	2	drivers	2
		others	6

8. Later a sister health centre at Wakiso, also near Kampala (the capital), was started in 1971 with aid from the USA (the chief coordinator, and hence most of the guiding principles having come from there), but with family health as the theme and special emphasis on family planning (which at that time was not recognised by the Government). The project was well staffed and equipped, with some of the vehicles being rare types and hence extremely difficult to repair owing to lack of spare parts. The following was the staffing position:

coordinator	administrative assistant
medical officer	field assistant
statistician	drivers (3)
sociologist	demographic assistants (4)
health visitors (3)	ancillary staff (4)
nursing sisters (3)	secretaries (2)

9. The project was based at the Institute of Public Health at Kampala. This necessitated commuting the 17 km. daily. The sponsors unilaterally withdrew from the country in 1973 following a new political change. Practically no financial resources were left to allow for a smooth transition during which the national Government could have absorbed the project within the existing financial resources. Inevitably the project faced collapse. Currently it is in a process of being revived.

Primary health care

10. With infrastructures of this nature – bulky, expensive and difficult to sustain or replicate elsewhere in the country – new avenues were sought for simpler but effective health units or systems which could cater for the majority population who live in rural areas (90 per cent of the population). To this effect a seminar on primary health care was organised in December 1976 by the Ministry of Health with the assistance of the WHO and UNICEF. The seminar was attended by health inspectors, health educators, health visitors, nursing officers from all regions of the country, administrators and representatives from the Faculty of Medicine (the Institute of Public Health and the Department of Paediatrics and Child Health). At least in Uganda, these are the persons and organisations facing real problems of the rural areas. Finally, the seminar recommended that the major public health problems of the country could be tackled more effectively only by simpler types of health personnel in the form of primary health workers who should come from amongst the people and also live with them. Their main health care function should be preventive in nature.

11. The selection, scope of training and conditions of service for primary health care workers were summarised as follows:

Selection

- (i) Selection should be done by the members of the community concerned.
- (ii) The primary health care worker should be selected from the same community.
- (iii) The educational standard should be from P. 7 to S. 2, so as to enable the workers to benefit from training and to be able to keep records and write short reports.
- (iv) The primary health care worker could be either male or female.
- (v) Age should be from 18 years upwards.

Training

- (i) Training should be done near the working area (i.e., health centre, school, district farm institute, community development centre etc.)
- (ii) It should be mostly practical and geared to the problems the worker will deal with.
- (iii) Initial training should last about 6–10 weeks.
- (iv) Periodical in-service courses should be organised to keep the workers up to date.
- (v) The training should be done by medical assistants, health visitors, health inspectors, etc., who will be supervising the work of the primary health worker.

Content of training

Primary health care workers should be taught elementary personal and community health, sanitation, control of diseases common in the area, health education, family health, simple diagnosis and treatment, first aid treatment, referral system, record keeping and report writing.

Duties and responsibilities

- (i) Health education; nutrition education.
- (ii) Home visiting; assisting in immunization programme.
- (iii) Follow-up.
- (iv) Giving simple first aid treatment.
- (v) Referring people for medical treatment.
- (vi) Improvement of sanitation.
- (vii) Giving advice on growing food.
- (viii) Promoting community development.
- (ix) Keeping records.
- (x) Writing reports.

Allocation in working areas

There should be from 1–4 primary health care workers per parish in a district. Both sexes should be assigned to a community.

Selection of working area

- (i) Selection should be based on the incidence of diseases in the area, human behaviour (superstitions, beliefs etc.), and the lack of medical and health services.
- (ii) Pilot project in a selected parish with a health centre in order to make supervision easy and referral possible.

Equipment

Primary health workers should be provided with:

- (i) bicycle, raincoat, gum boots.
- (ii) first aid box with dressings, tablets (aspirin, chloroquine), record books, etc.
- (iii) teaching aids, posters, etc.

Supervisors (medical assistant/health visitor/health inspector) should be given a motor cycle.

Place of work

- (i) Under a shady tree.
- (ii) Homes
- (iii) Community development hall
- (iv) Village hall
- (v) Medical units.

Salary

Shs1313/- per month. This was agreed on because primary health care workers will be expected to travel a lot in the community and will be expected to be available for consultation 24 hours a day.

Integrated rural development

12. Following the seminar the Government realised that the primary health workers, being multi-functional personnel at the periphery, needed high inter-ministerial coordination both horizontally and vertically if they were to be effective. Another seminar was therefore organised in May 1977 by the Ministry of Health in coordination with the Ministry of Planning and Economic Development on integrated rural development. The Ministries of Education, Health, Agriculture, Animal Husbandry, Community Development, Provincial Administration and Land and Water Resources were all represented. Major constraints to rural development such as lack of planning, participation by the community, and transport and communication were thoroughly considered, while projects already instituted in the country by various agencies with a view to augmenting the concept of integrated rural development were highlighted. They included the following:

Namutamba pilot project on integration of education in rural development (UNESCO) – intended to make school leavers employable and absorbable in rural areas.

Home and environmental improvement programme (Ministry of Health) – intended to improve all aspects of the quality of rural life by motivating the communities on competitive basis.

Nutrition scouts pilot project (Ministry of Health/UNICEF) – under this programme primary school leavers are recruited and trained in health education, nutrition, child care and prevention of communicable diseases.

Community development programmes (Ministry of Culture)

- (a) National youth development schemes
- (b) Youth agricultural settlements
- (c) Refugee settlements
- (d) Rehabilitation centres
- (e) Community development clubs and leadership training, self-help schemes, vocational training and adult education.

Applied nutritional and rural youth programmes (UNICEF and Ministry of Agriculture) – intended to motivate rural families in the improvement of production and marketing of nutritive food crops.

Programme for better family living (UNFPA) – intended to be a fully integrated inter-departmental programme to ensure that rural efforts in education, health promotion, community development, agriculture, marketing, social welfare and other rural services reinforce one another.

Food and Nutrition Policy

13. The seminar on integrated rural development was soon followed by a meeting arranged by the Ministry of Planning to establish guidelines on future food and nutrition policy for the country along the lines suggested by a WHO consultant. All the relevant ministries and organisations attended the meeting. In summary it was agreed in principle to:

- (a) establish a national food and nutrition planning unit;
- (b) establish a national nutrition surveillance system;
- (c) integrate applied nutrition programmes into primary health care.

A 'mini' training course for primary health workers

14. Meanwhile the WHO consultant who had been in contact with the Kayunga nutrition scouts pilot project hurriedly organised a brief course for the scouts on primary health care techniques with the aim of converting them into fully fledged primary health workers. A draft manual was also prepared at the end of the course for future use. Incomplete as the manual might be owing to the time factor, the ball has been set to roll. With careful amendments, particularly by local health personnel having relevant experience and expertise, the document could become very useful for future training.

Another approach to primary health care

15. Disenchantment with some of the health care units and experimental services, mainly based on ideas very often imported wholesale from countries whose health requirements, cultural backgrounds, geographical features, disease distribution and financial resources are entirely different from those of Uganda, necessitated a new approach to what type of primary health care could best suit our environment and limited resources. The Public Health Department of the Kampala City Council together with the Institute of Public Health (Makerere University) jointly embarked on a health care service in a slum area of the city (Makerere-Kivulu) aimed at the high-risk groups of a population totalling a little over 2,000 with a well-defined area. The exercise, which started in late 1975, encompassed a mobile maternal and child health service conducted in the shade of trees. The population structure warranted a family health approach (with emphasis on MCH) as 50 per cent were aged 15 years or less and 18 per cent were women in their reproductive age.

16. Our move was one of great caution: to fully mobilise the population, to actively try to involve them in every activity being undertaken and yet to avoid any notion which would lead them to expect from the Government what it cannot afford – in other words, a self-help project or people's own project. The community have now erected a shelter for the mobile health team, and all their activities are carried out by a representative committee from the community itself.

17. This is the first project of its kind in a slum area in this country. With the well known background of slum dwellers – high mobility, heterogeneity and lack of common identity – there are bound to be many problems and if the project succeeds, the experience gathered could help other slum areas in developing countries.

18. UNICEF has indicated its willingness to provide some limited assistance which will enable the community to train primary health workers suitable for such an area, and more so to combat delinquency which is so rampant in the area. Other collaborators will be the university departments of paediatrics and child health, and social work and social administration. Arrangements are also under way to extend such experimental services to other notorious slum areas where crime rates and delinquency are high.

Health planning in Uganda

19. If there is any infrastructure lacking at the Ministry of Health headquarters and which merits priority for establishment, it is a separate planning unit. This function previously was undertaken by the principal medical officer responsible for administration besides his other routine duties. The Ministry has now given priority to set up such a unit and has asked for assistance from the WHO for a consultant. We must admit health planners are rare birds, particularly those who are well acquainted with problems of the developing world, which differ from country

to country. Meanwhile most of the current planning work is carried out in various meetings of the Ministry, at various levels, and in seminars (e.g. country priorities and programming meetings).

Administrative structure

20. Following independence, the Ministry of Health was headed by a Chief Medical Officer (now Director of Medical Services) who also held the post of Permanent Secretary. He had a deputy and principal medical officers who headed divisions dealing with planning and administration, public health, maternal and child health, training and communicable diseases control. There were then four provinces (which became regions at independence) in the country in each of which the Ministry was represented by a senior medical officer supported by district medical officers. There were then only 17 districts, and each district medical officer was a medical officer of health for his district's metropolis. His main function was to run the district health services, which consisted mainly of health centres, dispensaries, sub-dispensaries and aid posts. He was mainly responsible to the district local administration to whom he was seconded by the central Government. He had no control over the district hospital which was directly under the Ministry's headquarters and locally administered by a medical superintendent.

21. Other members of the district team were the district health inspector and the district nursing officer (who could be a health visitor or merely a state registered midwife).

22. During the third five-year development plan and following a major general administrative overhaul of the whole country (involving the creation of ten provinces containing 38 districts, with each province being headed by a governor) a province became medically under the administration of a commissioner. Together with commissioners of other ministries, today they form what is known as the provincial team headed by the governor. The provincial commissioner of health is assisted by the provincial health inspector and the provincial nursing officer. With the new reorganisation, all responsibilities for setting up and administering health centres and all other rural medical units were transferred from the local authorities to the Ministry of Health. This was done to increase efficiency and to bring about a uniform system of administration.

The training of medical manpower

23. The Government of Uganda, in trying to produce increased numbers of medical personnel to man the different disciplines, has always insisted on maintaining a high quality of training. In this the strategy has changed from the old technique of teaching by intuition to that of clearly written out objectives based on the national health policy, local needs, demands and the tasks to be performed. A good example is provided by the institutional objectives of Makerere University Medical School.

Institutional objectives

24. The undergraduate training programme at Makerere University Medical School aims at producing a scientific multi-purpose doctor who will be capable of delivering effective medical and health care to individuals and whole communities in the rural and urban settings of East Africa.

25. More specifically, at the end of his undergraduate and internship training, the medical graduate should be:

- (a) able to diagnose the common or important diseases/conditions, with special reference to East Africa – i.e. to:
 - (i) take a history adequate to contribute to diagnostic possibilities,
 - (ii) conduct a proper general and an appropriate local physical examination,
 - (iii) carry out or request appropriate routine and special investigations,
 - (iv) consult, if necessary, other reference sources (e.g. colleagues or books),
 - (v) reach a diagnosis on the basis of the information collected.

- (b) able to develop a care plan, not only appropriate to the diagnosis, but also one that taps, economically, the available resources – i.e. to:
 - (i) perform a number of medical and surgical procedures that will contribute to the proper management of his patients,
 - (ii) initiate and perform most of the emergency life-saving treatments,
 - (iii) follow up his patients, if necessary, for evaluation of the initiated care plan;
- (c) able to develop and use a referral system – i.e. to:
 - (i) recognize his personal inadequacies and the possible limitations of his physical facilities,
 - (ii) consult with appropriate colleagues or decide which patients to refer, the urgency of the referral, and what interim measures to take until the patient is transferred to the appropriate medical facility,
 - (iii) summarize and clearly communicate information (verbally or in writing) to colleagues;
- (d) able to follow a philosophy of consideration for disease in relation to the whole patient, his family, the community, and the total environment;
- (e) able to maintain a good doctor-patient relationship – i.e. to:
 - (i) preserve the patient's dignity,
 - (ii) maintain a humane relationship with the patient and his family;
- (f) able to follow a philosophy which integrates prevention with cure and rehabilitation, and to organize measures for promoting health and preventing communicable and other preventable diseases;
- (g) able to organize and carry out simple scientific investigations of local clinical and community health problems;
- (h) able to undertake some medical and public health administration – i.e. to organize, work with, and supervise efficiently a variety of auxiliaries in his health team, including organizing their in-service training;
- (i) able to exhibit duty-consciousness and adaptability to the unscheduled events of illness such as those that will demand his services outside the official duty hours;
- (j) motivated enough to pursue his own professional continuing education – i.e. to remedy deficiencies, keep up to date, or, in conformity with his country's need for specialist medical scientists, acquire higher qualifications;
- (k) able to exhibit a high ethical and administrative integrity.

Departmental goals

26. Since the theme of this conference is Community Health, it is appropriate that the departmental goals of the Institute of Public Health – responsible for the teaching of community medicine in the university should be reproduced.

27. With emphasis on relevance for Uganda, East Africa and the African region as a whole, the Institute of Public Health aims at producing a doctor who can do the following:

- (a) make a community diagnosis using epidemiological data, and apply this in the practice of community health appropriate for the setting in which he will work;
- (b) plan, deliver or modify existing health services to suit the needs of the community;
- (c) integrate knowledge and skills of preventive medicine in clinical practice;
- (d) conduct research into community health problems as much as funds, personnel and time permit;
- (e) identify situations in which it is necessary to consult medical experts and others – e.g. sociologists, demographers, epidemiologists;
- (f) utilize services of relevant voluntary agents available – e.g. Red Cross, IPPF, Salvation Army, child care agencies, youth organizations;

- (g) be motivated enough to pursue his own professional continuing education in preventive medicine;
- (h) maintain a good doctor–community relationship – e.g. by being involved in medical and non-medical community activities;
- (i) organize, work with and supervise efficiently a variety of medical and para-medical personnel in his health team, including organizing in-service training.

28. These are further detailed under objectives, course content, learning experiences (e.g. problem solving sessions, lectures, seminars, discussions) and practical activities which include laboratory work and active participation in community health surveys (to establish community diagnosis) by the students.

29. Other training institutions are following and adapting the same methodology. Our training is still concentrated mainly in the following cadres who provide the bulk of the services for both hospital and peripheral units (curative and preventive):

medical assistants	laboratory technicians
nurses (state registered and enrolled)	laboratory attendants
midwives (state registered and enrolled)	entomologists
assistant health visitors	physiotherapists
health inspectors	orthopaedic assistants
health assistants	nurse tutors
public health dental assistants	midwifery tutors
	health visitors (course started in January 1976).

30. Because of current increased emphasis on prevention of communicable diseases – the leading ones causing death and morbidity being respiratory infections, malaria, intestinal parasitosis, enteric infections, respiratory tuberculosis, measles, tetanus, schistosomiasis (intestinal) and meningococcal infections – the role of health visitors, hitherto trained overseas, became crucial. A school for the training of fully-fledged health visitors by the Ministry of Health (under the aegis of the Institute of Public Health) was opened early in 1976 and the second group of trainees should complete their course in 1977.

31. Moves are afoot to create a single Institute for Health Studies which will be responsible for the training of tutors for various para-medical staff.

Conclusions

32. Certain measures undertaken by the government, either directly through the health care infrastructures, the community and certain agencies or through training institutions, over the years indicated a major shift in the health care delivery system. From the traditional approach of investigating and treating the individual patient, there is enhancement of a holistic approach of looking at a patient and his total environment, including the community where he lives. This is what makes up community health and community medicine. And perhaps a few institutions in the Commonwealth will refer to it as community care, just to indicate that its implementation is not the responsibility of the physician alone but requires team-work in which sociologists, health educators, health visitors, public health engineers, and administrators all play an important role. One university in particular in a Commonwealth country has taken the lead to emphasise the importance of community health by the establishment of a Faculty of Community Medicine.

33. The following points indicate that the health care delivery system has not remained static but rather is continuously changing, in search of what is best for the country.

- (a) The establishment of a department of preventive medicine which has now grown into an Institute of Public Health and is very highly involved in the training of cadres of personnel serving various sectors of the health care delivery system.

- (b) The third five-year development plan was a great improvement over its predecessor in that greater emphasis was laid on preventive services.
- (c) Experimental health care infrastructures such as the Kasangati Health Centre and the mobile MCH service (aimed at the pre-school child) have yielded good results but, being unrealistic because of limited financial resources, have remained irreplicable elsewhere. Hence a continued search for better approaches and strategies.
- (d) A lesson on external aid is that, where the technology of the programme is wholly imported and directed by alien people who have no consideration for the practicability of certain measures, success becomes remote. Projects funded from outside should be organised in such a way that if, at any time and for any reason, sponsorship is suddenly withdrawn, the national government or local authorities should be able to contain the situation with very little fiscal discomfort.
- (e) Primary health care — a new concept of extending health services to the most peripheral areas in a simple but effective manner which the country can afford, with the primary health workers themselves coming from and living with the community in which they work.
- (f) Food and nutrition policy has assumed greater significance, warranting a special unit in view of the role nutrition plays in health promotion and the rampant nutritional diseases in a developing country like Uganda.
- (g) The re-demarcation of large administrative units into smaller ones was meant to bring closer contact with the people and hence more efficient attention to their social and health problems.
- (h) The training policy for the different cadres of personnel has changed from the traditional to one based on objectives depending on the tasks to be performed. Professionals hitherto trained overseas in alien environments are now trained locally in the same ecological set-up in which they will work on completion of their training.

34. Currently the Government has embarked on an Action Programme involving all ministries. The main aim is rehabilitation and in the health sector this follows a massive departure of non-citizens in 1973, together with recurrent brain drain of the local personnel. During this period the Government will scrutinise conditions and terms of service which hitherto tended to favour curative personnel, thus leading to a gross imbalance. There will be an intensification of preventive measures against communicable diseases (more particularly parasitic diseases) and malnutrition in a package deal involving all the basic health services. At the community level much more emphasis will be placed on the vulnerable groups of under-fives and mothers through health promotion.

35. There is a recruitment drive in other countries to recruit mainly doctors to fill certain gaps. The Government has in this respect also stepped up the annual intake into the medical school to 120.

36. The Ugandan example could well serve as a case study for a developing country striving continuously to establish a health care system which is cheap, effective and best suited to the particular environment.

November 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of Kenya

Emphasis on development

A developing country – a descriptive term which implies the non-availability of acknowledged optimum standards of modern services in all sectors of the economy and social amenities – remains in a constant state of struggle to improve existing services and to introduce new ones. In a developing country change need not be viewed in the manner of the demolition of an old building so as to construct a new and better one. Rather such change, as in the case of health services, is in the form of continuation of construction of an uncompleted structure upon the already laid down foundation. In this context, we are thus dealing with the important subject of ‘development’ of health care delivery systems, rather than merely ‘change’ of what is at an early stage of evolution. The situation may be somehow different in the case of a developed country where optimum services and means exist, and what is needed is re-orientation of areas of emphasis and methods of health care delivery.

2. This emphasis on development, in the case of a developing country, applies to every aspect of health services: manpower development; programmes of training and curricula; management and administration; health information systems and planning; and research on health problems and new ways of maximum utilisation of meagre resources to deliver health care to the overwhelmingly rural population.

Delivery of health care

3. The Ministry of Health has the overall responsibility for the health services of the country. Prior to 1970, all local authorities had big health roles to play in relation to public health services, maternity wards, communicable diseases control, health centres and dispensaries, and ambulance services. The rural county councils did not have adequate resources, even with government grants, to carry out health responsibilities uniformly well throughout the country, and the Government had to take over the running of these services, excepting those of the larger municipalities.

4. Church hospitals offer valuable services complementary to those provided by Government in many areas of the country. The workers in those institutions are well-motivated for both curative work and health education, and they are often located among communities in remoter parts of the country. Industrial hospitals and clinics, private hospitals and individual practitioners offer clinical services to patients who can afford the fees, but often these facilities are in the city and the larger towns. The Government, through its National Hospital Insurance Fund, assists contributors, to some extent, in paying the fees for hospitalisation in approved privately-run hospitals.

5. Government health services are given practically free to citizens – including hospitalisation, operations and clinical tests in government hospitals. In the field, health care delivery is organised through the district health services, health centres in the divisions, dispensaries in the locations and villages, and mobile health units where static health units are not feasible. This system is extendable to the smallest of villages and to all parts of the country. Admittedly, the curative service given at the dispensary level is very basic and the personnel there are trained to deal with common minor ailments, but there is a line of referral of difficult matters from the dispensary to health centre, district hospital, provincial hospital and, for rare cases, to the national hospitals. This approach to organisation is also used in regard to the delivery and supervision of public health services, health education, nutrition education, family health services and even medical supplies.

Manpower development

6. Training of local personnel for the health services, at all levels of skills, has been given high priority in all the development plans since independence. This is one area where changes, and continuing improvements, had to be made to the curricula and programmes of training for all cadres employed in the health services, to make their training more relevant to the solution of health problems of tropical Africa. This does not in any way imply the lowering of standards of training below those of similar courses abroad, but rather to make those trained more oriented for better service in our environment.

7. The university training of medical doctors has been dealt with under the item headed 'The Role of Health Ministries and Medical Schools'. Although there are well over 1,700 doctors on Kenya's Medical Register, only about 580 of these are in government service, of whom around 100 are specialists in one discipline or another. Arrangements are being worked out to see how one or two provincial hospitals could be utilised in clinical training of undergraduates, with the aim of increasing the student intake at the Faculty of Medicine in Nairobi.

8. Considerable expansion has been found necessary in the training of nurses and other para-medical personnel, and also of medical auxiliaries. Whereas there were 812 students in training in 1964, this total had risen to 3,551 in 1977. The higher courses, such as those of registered nurses, public health officers, laboratory technologists, radiographers, pharmaceutical technicians, physiotherapists, registered midwives and public health nurses, are run at the Medical Training Centre and Kenyatta National Hospital in Nairobi, with parts of the training period being spent in a field setting. Junior or auxiliary cadres are trained mainly in the provincial and district setting. These auxiliary cadres of staff are the ones to be found in dispensaries and health centres all over the country, working under rather remote supervision from the district hospitals. Medical assistants, or clinical officers as they are known in Kenya, are trained at para-medical level in one of the provincial hospitals with field practical work in rural health centres. Delivery of tolerable health services throughout the country is made possible only through the utilisation of these trained para-medical and auxiliary medical personnel.

9. Training has been commenced for health educators, organised as a one-year in-service course for those already qualified as nurses, health officers and clinical officers (medical assistants). One area which remains to be developed is that of a well-organised institute for the training of tutors for all these cadres of personnel. We are aware that the Commonwealth Secretariat has taken an interest in the training of tutors on a regional basis and this is viewed as a very welcome move.

10. Two new cadres of staff illustrate a new approach to training for the more effective delivery of health services. These are the auxiliary cadre of field nutritionist and the village-based worker named the family health field educator. The field nutritionists are mainly already-qualified enrolled nurses who receive six months in-service training in nutrition and are later posted to district health services and health centres as part of the health team, their time being fully occupied on nutrition health education and demonstrations to mothers. The family health field educators are mature women selected from the village level where they live, and are given short-term training courses on basic aspects of maternal and child health and family planning. Their role is mainly motivational, to educate other villagers out of misconceptions and to give information on the available government services in relation to family health. They also work with MCH teams during team visits to the villages.

8 November 1977

CHANGING HEALTH CARE DELIVERY SYSTEMS

Background paper prepared by the Government of India

A comprehensive programme for the expansion of medical and health facilities was provided in the First Five Year Plan of the country, and this followed broadly the recommendations of the Bhore Committee (1946). During the Second Five Year Plan, the emphasis shifted from curative to preventive measures. Before the commencement of the Third Plan, the Government of India appointed another committee, the Health Survey and Planning Committee (Mudaliar Committee, 1961), which set out certain goals to be achieved, viz:

- (a) hospital beds 1 : 1000 population
- (b) doctors 1 : 3500 population
- (c) nurses 1 : 5000 population

2. The Fourth Five Year Plan assigned a priority to family planning (now known as family welfare) and this has also received high consideration during the current Fifth Five Year Plan.
3. The achievements and patterns of development during these Plan periods are shown in Annex I.

Doctor/population ratio

4. While in 1946 there were about 48,000 doctors, which gave a doctor/population ratio of 1 : 6,300, the number of doctors has increased to 154,000 in 1975–76, which gives a doctor/population ratio of 1 : 3,900. This overall ratio, however, conceals marked regional and rural-urban disparities. For instance, while the doctor/population ratio in 1974 in the States of Assam, Maharashtra and Punjab was 1 : 3,000, in Tamil Nadu and West Bengal 1 : 2,000, in Delhi 1 : 1,350 and in Chandigarh 1 : 600, in the States of Madhya Pradesh and Rajasthan it was approximately 1 : 10,000. It is also well-known that the majority of doctors concentrate in the urban areas.

Women Doctors

5. The percentage of women doctors has increased relatively much faster than the total number of doctors, being 7.5 per cent in 1956, 11 per cent in 1964 and about 19 per cent in 1970, due to increased enrolment of women in the medical colleges. The exact numbers are not available; and, due to marriage and other factors, many women who qualify as doctors do not actively practice the profession and account for a 'loss' in the overall manpower.

"Doctors" in other systems of medicine

6. In considering the manpower available, it is worthwhile mentioning that, apart from the modern systems of medicine, Indian systems of medicine – Ayurvedic, Unani, Siddha – and of homoeopathy, of naturopathy and of Yoga have received significant encouragement and support. This will be evident from following:

Practitioners of modern systems of medicine	154,000 (approx. 1 : 3,900 population)
Homoeopaths registered and enlisted	141,780 (approx. 1 : 4,000 population)
Indian systems of medicine	181,580 (approx. 1 : 3,000 population)

Utilisation of Doctors

7. It has been estimated that about 50 per cent of doctors are in private practice, about 45 per cent in public sector employment and the remaining 5 per cent in private sector employment. Of those in the public sector, 70 per cent are employed by State Governments as against 30 per cent by others (Central Government, quasi-government organisations and local bodies).

8. In India health is a State subject – that is, overall health manpower planning and health policies are under the direct control of the Government of the States comprising the Republic of India. The Government of India, however, provides substantial financial assistance to State Governments in carrying out several health programmes, such as smallpox eradication, malaria control, leprosy control, control of blindness, tuberculosis, school health, family planning and welfare. The quantum of central assistance can be judged from the financial inputs for the Fifth Five Year Plan, as follows:

Purely central schemes	Rs. 676.6 million
Centrally-sponsored schemes	Rs. 2,681.7 million
States/Union Territories	Rs. 3,483.3 million (excluding expenditure on malaria eradication)

General policies and goals to be achieved

9. The general policies relating to health care in India have been to increase curative facilities and to increase preventive care services. The goal is to take these to the grass-root level. Towards this goal, the Government has aimed to set up primary health centres, hospitals at district level, and sophisticated medical services at regional level. Apart from providing doctors, the Government aims at making available nurses, health visitors, auxiliary nurse-midwives and multi-purpose workers.

Growth of rural and public health services

10. The need to provide medical relief and preventive and promotive health care to over 80 per cent of people living in rural India is as great as the need to provide for the urban population.

11. The concept of primary health centre, as a new approach to meet the health and medical needs of the rural population, was first developed by the Health Survey and Development Committee, popularly known as Bhore Committee, in 1946.

12. It was felt that the most effective way in which health and family planning services reach out to the rural area is through the primary health centres and sub-centres. From these centres health education services and amenities radiate to the rural areas. They have come to form an integral part of the community development programme since 1952. Each primary health centre with about eight sub-centres covers a population of about 100,000. It provides a package of integrated health care, both preventive and curative, family welfare planning, maternity and child health, school health and nutrition education. It is also responsible for health education and the collection of basic statistics.

13. It was also envisaged that each primary health centre should serve as a local point from which integrated health care services, both preventive and curative, would radiate into the entire population served by a community development block.

14. At present there are 5,373 primary health centres with about 37,931 sub-centres functioning in the country. As envisaged, the functions of a primary health centre are medical relief, control of communicable diseases, maintenance of environmental sanitation, recording of births and deaths, health education, school health, nutrition, maternity and child health and family planning (welfare).

15. Experience gained during the last two decades in the provision and development of health services has revealed that para-medical workers should be so trained and oriented as to be fully useful in carrying out a diversity of health programmes. The earlier concept of deploying uni-purpose workers has therefore been replaced by one of multi-purpose workers more suitable for delivering the package of health services to the community.

16. The medical curriculum has been constantly under review to meet the changing needs of society and to provide adequately for future requirements of the rural areas. Recently, the Government has accepted recommendations of a group on 'Medical education and support manpower' which include the creation of a cadre of para-professional or semi-professional health workers from within the local community itself to provide simple preventive, curative and promotive health services to the people. The group also suggested the creation of a new cadre of health assistants to act as the link between the doctors at the primary health centres and the multi-purpose workers in the field. A chart showing proposed organisations set up of the primary health centre complex is at Annex II.

17. Nursing education has not lagged behind. There are now 264 schools of nursing, 25 health visitors' schools, 336 schools for auxiliary nurse widwives, eight colleges of nursing and two post-graduate colleges of nursing in the country. The annual turnover is 5,700 nurses, 600 health visitors and 5,400 auxiliary nurse-midwives.

18. Besides this, there is a steady improvement as regards the posting of doctors in the primary health centres. The main reasons for this improvement are various types of incentives which are given by the State Governments in order to attract young medical graduates to work in rural areas. The package of incentives and assistance that is being recommended includes rural allowance and rent-free accommodation, forming a single cadre of doctors in rural and urban areas, and giving stipends to medical students to undertake to serve in villages for certain number of years.

19. The Government of India has launched the new scheme for strengthening health care services in the rural areas from 2 October (Mahatma Gandhi's birthday) 1977. The purpose behind the scheme is to provide adequate medical care to the rural people and at the same time to educate them in the matters of preventive and promotive health. Although there are 5,375 primary health centres and about 37,931 sub-centres providing medical services in the villages, this vast network has not actively involved the people in the villages. One of the principal reasons behind the new scheme is to encourage people's participation in the health care programme, and generate the necessary enthusiasm.

20. Under the new scheme, every village with a population of 1,000 will be expected to select its own representative who belongs to the community, enjoys its confidence and has the sincerity and competence to serve it in the area of health. This representative will be given suitable training in tackling simple and basic health problems. The people to be selected will be preferably below the age of 30 years and will have some formal education, at least up to the sixth standard. The training will be given for a period of three months in batches of 20 in the primary health centres and sub-centres. The curriculum includes the fundamentals of the health scheme, measures for maintaining good health, hygiene, treatment of common infectious diseases, maternity and child care, treatment of common ailments and first aid. Traditional systems of medicine and yogic methods of maintaining physical fitness will receive due importance in the training programme. At the end of it the village representatives will be given a test and awarded a certificate. They will also receive a kit consisting of common remedies from the modern and traditional systems of medicines and a simple manual. They will then be expected to return to their villages and work there.

21. These workers will be called community health workers. They will be free to attend their normal vocations – agriculture, teaching, craftsmanship, etc. They will render health services to the community in their spare time for two to three hours every day. It is expected that over a period of about three years from the launching of the scheme there will be 5.8 lakhs community health workers in the villages.

22. The infant mortality rate in India is quite high — in 1971 it was 120 per thousand. Deliveries take place mostly in village homes under the care of unqualified and untrained midwives (*dais*). This is a very unhappy situation. For a long time to come it will not be possible to provide adequate arrangements under which all or even most deliveries may take place in hospitals and health centres. The new scheme, however, envisages the training of one *dai* in every village — the total number will come to 5.8 lakhs over a period of two to three years. The training period will last a month and during it every *dai* will be given a stipend. She will also be provided with a kit containing simple safe delivery apparatus. This kit will be replaced free as and when needed. The *dais* who undergo training under the scheme will, like the community health workers, be selected by the village community. They will belong to the village in which they will have to work. In fact, they are already working there and have professional experience, though no qualification. The training will improve their knowledge and expertise and it will be given in the primary health centres. They will include elements of pre- and post-natal care for women. The *dais* will also be expected to propagate the small family norm amongst women.

23. Springing as they do from the soil of the land, we expect that the community health workers and the trained *dais* will in course of time narrow the big gap that today exists between the science of medicine and the rural community. At the professional level these workers and *dais* will have the guidance and support of multi-purpose workers — two (one male and one female) for a population of 500, to be achieved by the end of sixth Plan. A large number of these workers are already under training. They will constitute a core of the integrated health and family welfare service and will look after the basic health programme, including family welfare, in the villages. They will give special attention to preventive and promotive health and maternal and child care. At a slightly higher level the multi-purpose health workers will be supervised by health assistants whose training has already been started and then by the medical officer of the primary health centre.

24. A chart showing the referral services from the village and hamlet to the regional hospital attached to a medical college is at Annex III.

ANNEX I

ACHIEVEMENTS OF INDIA'S FIVE YEAR PLAN

<i>Categories/units</i>	<i>1st Plan end 1958</i>	<i>2nd Plan end 1961</i>	<i>3rd Plan end 1966</i>	<i>Latest position available</i>
1. Hospitals and dispensaries	10,000	12,600	14,600	15,731
2. Hospital beds	125,000	185,600	255,700	295,016 (1975-76)
3. Primary health centres	725	2,800	4,930	5,373 (1976)
4. Family planning centres	—	1,649	5,057	6,669 (1970)
5. Education				
<i>Medical education</i>				
Medical colleges	41	62	89	106 (1976)
Annual admissions	3,958	6,846	10,520	12,500 (1976)
Annual output	2,732	3,900	5,387	11,600
<i>Dental education</i>				
Dental colleges	6	11	13	15 (1975)
Annual admissions	178	369	508	551 (1975)
Annual output	71	141	283	481 (1975)
<i>Nursing education</i>				
<i>General Nurses</i>				
Nursing institutions	221	235	253	266 (1976)
Enrolment	7,333	10,290	17,401	20,666
Annual output	1,962	2,562	4,322	4,963
<i>Auxiliary nurse-midwives</i>				
Training institutions	47	201	299	330 (1976)
Enrolment	1,046	5,053	9,795	11,088
Annual output	42	1,828	3,943	4,473
<i>Health visitors</i>				
Training institutions	11	21	19	23 (1976)
Enrolment	715	1,163	1,186	1,426 (1968)
Annual output	103	412	440	584
<i>Pharmacists education</i>				
Pharmacists institutions	11	21	43	51 (1975)
Annual admissions	233	723	1,818	2,722
Annual output	193	367	749	—
6. Manpower stock				
Doctors (estimated)	65,000	72,000	87,000	154,000 (1975-76)
Nurses (estimated)	18,500	31,000	45,000	98,000 (1975-76)
Auxiliary nurses-midwives	392	6,452	21,683	39,000 (1970)
Health visitors	800	1,500	3,800	7,800 (1970)
Dentists	—	—	8,175	9,000 (1970)
Pharmacists	—	42,000	48,000	51,000 (1969)

ANNEX II

PROPOSED ORGANISATION CHART OF THE PRIMARY HEALTH CENTRE COMPLEX

Population — 80,000

Primary Health Centre
 Pharmacist Medical Officer
 Laboratory Technician Health Assistant
 Computer Storekeeper-cum-Clerk

20,000 population	Health Supervisor (male)	Health Supervisor (male)	Health Supervisor (male)	Health Supervisor (male)	Health Supervisor (female)	Health Supervisor (female)
	2 Sub centre	2 Sub centre	2 Sub centre	2 Sub centre		
5,000 population	H.W. 4	H.W. 4	H.W. 4	H.W. 3	H.W. 4	H.W. 4

proposed:—(1) *Peripheral level worker*

1 male works for 5,000 — 6,000 population
 1 female works for 9,000 — 10,000 population

EXISTING PERIPHERAL WORKERS

(1) BASIC HEALTH WORKERS 8
 (2) Family Planning (HA) 4 for 80,000
 (3) Vaccinator (S.PCX) 3
 (4) Auxiliary nurse-midwives 8

SUPERVISOR 1. Male Supervisor for 20,000 — (1) Sanitary inspector 1
 (2) Health inspector 2 for 80,000
 (3) Smallpox supervisor 14

2. Female Supervisor for 40,000 — Lady health visitor/P.H.N. 2 for 80,000

