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HEALTH TECHNOLOGY POLICY IN THE AFRICAN REGION

Report of the Regional Director

EXECUTIVE SUMMARY

1. Health for all through primary health care, proclaimed in Alma Ata in 1978, will remain a major goal in the coming years and century.

2. To achieve this goal, the majority of countries in the Region are reforming their health systems and services in order to ensure equity in health and access to health care.

3. Technology development has played and continues to play an essential role in promoting health care delivery.

4. The, scope of health technology is very wide. This document focuses on biomedical equipment which is, *inter alia,* one of the major concerns of the countries in the Region.

5. The policy statement and the strategy for its implementation proposed in this document aim at assisting Member States to formulate health technology policies and plans that support the achievement of their national health policy.

6. Priority interventions should address: (i) technology management; (ii) human resources development; (iii) research and communication; and (iv) access to information.

7. The Regional Committee is invited to examine the proposed document, make suggestions for its improvement and adopt it in support of the health-for-all policy in the Region.

CONTENTS

I.   INTRODUCTION

1.   The commonly used definition of health technology includes drugs, devices, medical and surgical procedures, the knowledge` associated with these in the prevention, diagnosis and treatment of disease as well as in rehabilitation, and the organizational and supportive systems within which care is provided.

2.   In the African context, the critical need for implementing a health technology policy and strategy at the present time relates primarily to drugs and equipment. This document does not deal with drug issues already addressed in the WfEO essential drugs programme. It deals with medical equipment and related issues in response to the interest expressed by countries in the Region.

3.   Several countries in the Region have already attempted to develop and implement national health technology policies and plans. Despite this growing interest and current developments, there is a need to strengthen health technology plans in Member States.

4.   The purpose of this document is to propose policy and strategic orientations to assist Member States to develop and implement national health technology plans.

II.   POLICY STATEMENT

5.   The word policy, as used throughout this document, means a statement of intent to do something, an orientation and a guide for action based on a set of values and guiding principles aimed at influencing and determining long-term` decisions and actions.   Even so, policy is limited in time and scope. Furthermore, health technology policy does not exist in a vacuum, but within a context provided by broader policies, e.g health policy and development policy. This document therefore covers a period of ten years.

6.   There is a need to change approaches to policy and decision-making so that, rather than taking action in reaction to pressure, lobbies and emergencies, more rational and sustainable approaches based on objective criteria are used., 'Scientific evidence should be used to inform the decision-making process.

7.   Partnerships involving government bodies, NGOs, consumers groups, the private sector, industry, etc. are likely to gain increatsing importance. The synergy created by partnerships enhances progress. Governments have a pivotal role to play in creating an enabling environment which includes the formulation of policy, the putting in place of regulatory systems, the institution of correct fiscal controls, the monitoring of use and quality, the promotion of human resource development and the directing of research.

8.   There is a pressing need for a systematic regional approach to health technology in Africa. Individually, few Member States, if any, have the resources and know-how to succeed in this venture. But taken as a whole, the Region has virtually all the health technology, know-how and other prerequisites.

9.   The *aim* of a regional health technology policy is to contribute to the achievement of the health objectives of the Region.` by strengthening the capacity of countries to optimize the acquisition, management and use of their technological resources in order to assure universal and equitable access to essential quality care.

10. Three *guiding principles* will have to be followed to ensure the effective implementation of this policy, namely:

(i) To give health technology high priority as an essential component for the comprehensive development of the health system and for assuring improved equitable Access of the population to affordable and sustainable quality care.

(ii) To plan the introduction of health technology and manage it properly, taking into account the needs and aspirations of the population, the environment and its trends, and available resources.

(iii) To systematically give preference to technological options which, for the same life-cycle cost, have proved their effectiveness in the Region and in other countries in similar contexts.

III.   SITUATION ANALYSIS AND JUSTIFICATION

SITUATION ANALYSIS

11.   The Regional Office has established a Healthcare Technology Task Force which is providing assistance to Member States. It has, for example, produced two important documents (Guidelines for donation of health care equipment, and a guide for the formulation of a national healthcare equipment policy) and is developing tools for health technology management, an essential technology package and a data base on documentation and other resources. It also participates in consultations and other meetings. Despite these achievements, much remains to be done.

12.   Rapid advances in technology over the past few decades have placed countries in the Region under intense global market and internal pressures to import modern health technology. The proliferation of these technologies, resulting in a bewildering array of choices, creates demands *which* tax the limited resources of these countries. Consequently, the introduction of technology in these countries is driven more by pressures from technology producers and users than by country needs.

13.   Demands on the health care system are increasing in all countries of the Region. At the same time, costs are increasing, and the gap between needs and resources is widening. There is therefore a need for a clear and comprehensive policy on health care technology. However, due to problems arising from financing, lack of understanding of this situation by decision-makers and health care workers in general, inadequate institutional framework and managerial and technical capacities, it is easier to formulate policy than to implement it.

14.   Apart from problems of human resources and the need to finance recurrent costs, more important issues concerning the administrative, economic and political environments of African countries impinge on the sustainability of technologies and equipment.

15.   Although information is the key to rational decision-making on health care technology, it is often not available or is not in a comprehensible or standardized form. Similarly, reliable communications remain a critical priority for improving the effectiveness and efficiency of health care technical services.

16.   Health technology assessment' should be carried out in order to orient decision-making.' For the moment, activities are rarely carried out in this area in Africa.

'Technology assessment is "An analytical process aimed at estimating the value and relative contribution of each health technology to the improvement of individual and collective health, taking into account its economic and social impact"

17. A serious problem in the Region is lack of qualified technology and equipment management and maintenance staff.

18. Owing to free market choice at the time of purchase, and to the lack of agreement between countries and organizations, little is done to standardize medical equipment used in health facilities as well as in research and educational institutions. Donated equipment from various sources, which accounts for a significant portion of the stock of equipment, usually means a multiplicity of makes and models of the same type of equipment, which renders the operation and maintenance of the equipment extremely difficult and unnecessarily costly.

19. All the difficulties mentioned above are exacerbated by the need to provide health services to a rapidly growing population, in increasingly congested conditions in cities, and in economically depressed environments. These problems require the immediate attention of policy-makers.

JUSTIFICATION

Institutional justification

20. The role of health technology in community health and welfare in general is underscored in various texts.

21. The Alma-Ata Declaration focuses on the use of appropriate technologies - scientifically valid, socially acceptable and universally available to all individuals and families of the community at a cost that the community and the country can afford at all stages of their development - in the implementation of primary health care.

22. Resolution WHA29.74 of the World Health Assembly requested the Director-General "to take adequate measures to establish and develop a programme of health technology relating to primary health care and rural development as part of the overall primary health care programme".

23. Resolution WHA31.34 of the World Health Assembly invited Member States "to promote the use of available appropriate technology and develop new technology needed for better implementation of health care, particularly primary health care".

24. Resolution AFR/RC44/R15 of the Regional Committee urged Member States, among other things, "to develop a comprehensive health technology policy as an integral part of their overall national health policies and development plans" and requested the Regional Director "to reinforce the Organization's assistance to Member States in the development and implementation of health technology policies and plans, training and information support". Since the adoption of this resolution, a number of activities at country and regional levels have served to increase awareness of the needs of the Region in the area of health technology. Effective advocacy has resulted in greater commitment on the part of governments to improve the acquisition and utilization of health technology for the enhancement of the health status of their citizens.

25. The Cape Town Conference (April 1994) and the International Summit on Health Technology (Harare, April 1998) made recommendations similar to those contained in resolution AFRIRC44/R15.

26. The common theme in all these declarations and resolutions is the need for countries to adopt comprehensive and integrated strategies in this area.

Social. and economic justification

27. Technology can play a key role in achieving the objectives of health sector reform, particularly better access to health care by the population, greater equity, improved quality of care and increased cost-effectiveness of health services. This requires an appropriate policy and strategy in order to plan and manage the various aspects of health care equipment as well as other components of physical infrastructure and technology, which consume the bulk of the investment budgets of ministries of health. Adequate policies and strategies would lead to the attainment of health development objectives in a, sustainable manner.

28. Experience has shown that the purchase price of equipment is usually only a small portion of the cost of its life cycle. In. all procurements, provision should be made for coverage of recurrent costs that can reach the annual rate of 3 to 8 percent of the purchase price.

29. The ongoing health sector reform, the increasing needs of the populations and their expressed demand for quality care services represent both an opportunity and an obligation for countries and WHO to ensure both improvement in the functioning of health systems and implementation of a rational health technology policy. Members States need to develop a regional policy in order to solve the many common problems which they face in their effort to use technology for the improvement of the health of their people.

IV. IMPLEMENTATION STRATEGY

OBJECTIVES

30. The implementation of a regional health technology policy aims at ensuring that each Member State:

  (i)   develops a health technology policy supportive of the implementation of its health policy;

  (ii) acquires the capacities required for mobilizing stakeholders and implementing, monitoring and evaluating the policy;

  (iii) establishes, where necessary, and reinforces. a comprehensive human resources development process in order to provide the health system with qualified staff in the areas of planning, management, utilization and maintenance of health technologies;

  (iv) encourages research in the key area of technology assessment, which is a rational basis for judicious long-term policy and strategy decisions, and promotes the use of evidence in decision-making;

  (v) establishes and applies norms and standards in the utilization of health technology.

EXPECTED RESULTS

31. By the end of 2010,

  (i)   at least 50‰ of Member States will have developed a national health technology plan;

  (ii) at least 30% of Member States will have implemented priority interventions in the area of health technology;

(iii) all countries will have included training in all levels of health technology as an integral part of their human resources for health development plan;

(iv) at least 20% of countries in the Region will have carried out a countrywide situation analysis, using appropriate tools;

(v) at least 50% of countries will have established adequate structures to cope with technology management at all levels of their health system;

(vi) at least 40% of countries will have included research on technology in their health systems research plan;

(vii) at least 60% of countries will have included technology information as part of their health information system.

PRIORITY INTERVENTIONS

Advocacy

32. At the country level, it will be necessary to embark upon advocacy vis-a-vis policy-makers and health officials to create the political will to include health technology in the list of national policy priorities and to identify and mobilize institutional partners so as to benefit from their support. This political will should lead to the establishment of appropriate mechanisms and tools for the implementation, monitoring and evaluation of the health technology policy.

33. At the regional level, measures to be taken will focus on the endorsement of this strategy by Member States, leadership to support the inclusion of health technology in national health development priorities, and implementation of relevant national plans.

34. The priority interventions described below are linked and should be implemented concomitantly. They should not be considered as either exhaustive or successive steps over time.

Technology management

   (a) Institutionalization

35. Adequate structures should be created and capacities developed for institutionalized technology management at regional and country levels. Within countries, this institutionalization should cover all levels of the health system.

   *(b) Situation analysis and identification of **needs***

36. At the country level, an objective situation analysis of infrastructure, equipment and procedures is an essential step in the implementation of the plan. A national expert committee, assisted, if necessary, by external support, should be in charge of the evaluation. The situation analysis should lead to recommendations that take into account the epidemiological profile and the available human, material and financial resources of the country.

37. At the regional level, the required support will be provided by facilitating exchanges and making expertise available to countries at their request.

(c)   Norms and standards

38.   Norms and standards for infrastructure, equipment and procedures are a necessity and should conform with reform approaches for a rational use of resources.

39.   At the country level, it will be advisable:

   (i)   to establish mechanisms for identifying the resources and types of technology needed at each level of the health system;

   (ii)   to develop norms and quality standards applicable to both the public and private sectors;

   (iii) to prepare a time frame and identify the support needed to attain the standards, taking into account the current situation and available resources.

40. At the regional level:

   (i)   The development of a methodology for the acquisition and utilization of equipment should lead to tools for evidence-based decision-making.

   (ii) Technical cooperation on regulations to ensure the safety of users and patients should be promoted.

   (iii) The possibility for group purchases among countries or institutions should be encouraged, where possible, for selected types of equipment and consumables. The advantages of such an option include reasonable price offers, better use of available expertise and more rigorous financial control.

(d) Information system

41.   Measures should be taken to improve the collection, analysis and use of information on equipment management.   This should include profiles and maps indicating existing and operational health institutions, available staff, epidemiological data, and equipment locations in a Geographical Information System.

42.   At the country level, the following measures should be taken:

   (i)   Services for the collection, processing and dissemination of data and information should be strengthened at the central level.

   (ii)   Management of information should be decentralized to the peripheral level for planning and monitoring purposes.

   (iii) Information should flow in both directions - from the periphery to the centre and vice-versa.

   (iv)   Information on health care equipment should be integrated into Health and Management Information Systems.

43.   At regional level, a data base on relevant information, linked to international data bases, and a network for information exchange should be established. This data base should be accessible to all countries of the Region.

Human resources development

44. One major thrust will be the creation of a "critical core" of staff trained in the different areas of health technology. Particular attention should be given to the training of staff in management, maintenance and repair of equipment as well as in technology assessment, where this category of staff is in very short supply.

45. At the country level, a special effort should be made:

(i)   to enable candidates to be trained in health technology;

(ii)   to offer attractive career prospects to health technology management, maintenance and repair staff;

(iii)   to integrate trained health technology and infrastructure staff, including district teams, into health management at all levels of the system;

(iv)   to provide training for users of equipment, in order to improve safety and to reduce breakdowns.

46. At the regional level, country actions will be supported by the identification and strengthening of centres of excellence, the institution of a rational fellowships programme and the establishment of training programmes adapted to the regional context.

Research

47. Research on technology is part of health systems research. Technology assessment, which is a recent field in operational research, should be based on existing situations. It should:

(i)   be concerned more with quality and effectiveness than cost containment;
(ii)   emphasize macro-assessments;
(iii)   be perceived as an essential component of the regulatory role of ministries of health;
(iv)   be an important area of regional and international technical cooperation.

48. Two factors favour the undertaking research and training in technology assessment.

There is a bewildering array of technologies available. Current estimates show that there are about 6000 different types and 750 000 brands and models of equipment on the market, available from over 12 000 manufacturers worldwide.

• There is pressure on countries in the Region from special interest groups such as representatives of manufacturers, end-users and professionals.

49. Each country should identify its own needs and priorities in the area of health technology assessment and operational research, and adopt a way of organizing these activities that is most appropriate to its situation and development and health sector reform strategies. In this regard, the experience gained by WHO and its partners in programmes such as drugs and vaccines, diagnostic imaging, radiation therapy, radiation protection, clinical laboratories and blood banks and appropriate technologies for the primary level should serve as an excellent reference and a good starting point.

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[2] World development report, 1993

50. At the regional level, WHO should serve as a facilitator, cooperating with countries and other partners in the preparation of appropriate policies and mechanisms for promoting health technology assessment and operational research which includes:

   (i)   identifying relevant national and international partners and institutions in the field of technology assessment and operational research;

   (ii) encouraging coordination of activities at country level;

   (iii) supporting situation analyses and identification of needs;

   (iv) supporting the setting of priorities for health technology assessment and management;

   (v) facilitating coordination with international agencies, groups and networks;

   (vi) supporting or organizing workshops and seminars on the methodology and practice of health technology assessment and supporting the introduction of health technology assessment in different curricula;

   (vii) supporting technical cooperation in the assessment of specific technologies and dissemination of the results.

Communication and access to information

51. Networks should be created at national and regional levels to facilitate communication among health care technical services using modern technologies.

V. IMPLEMENTATION FRAMEWORK

RESOURCE MOBILIZATION

52. At the country level, a multisectoral approach should be adopted for developing and implementing the health technology plan; such an approach should bring together all institutional partners concerned in both the public and private sectors - lawmakers, health officials and administrators, researchers, biomedical engineers, managers of medical equipment, the community, etc. Adequate financing should be made available through the health budget of the country.

53. At the regional level, WHO and other partners will support country efforts in the formulation, adoption and implementation of a coordinated health technology policy and plan. This support should, *inter alia,* stimulate the allocation of sufficient funds to the health sector, and enhance their equitable distribution and efficient use.

MONITORING AND EVALUATION

54. There is a need to monitor and evaluate the implementation of this regional strategy in the countries. For this purpose, WHO will support the establishment of monitoring and evaluation indicators and the conduct of a mid-term evaluation (2005).

55. At the country level, a national advisory committee, representing the institutional partners cited, above, should assist the ministry of health in the regular monitoring and evaluation of the implementation of the process, using well defined indicators, and should, when necessary, propose adjustments.

56. At the regional level, the Health care Technology Task Force, in cooperation with relevant partners in the field (collaborating centres, professional associations, universities, cooperation agencies, NGOs,

etc.), will support the Regional Office in monitoring the implementation of the strategy. A follow-up report will be submitted every year by the regional programme concerned.

VI. CRITICAL FACTORS FOR SUCCESS

57. Successful implementation of this regional policy will depend, among other things, on long-term political commitment, the establishment of real conditions for ownership of the process within the countries, continued availability of a critical core of trained technical staff, effective resource mobilization and adequate budget provision.

58. An enabling environment includes the commitment of Member States and other partners to health sector development, including technology, as an integral component of socioeconomic and human development; reformed health management which introduces more transparency and equity in resource utilization, and the expressed will to improve the health status of the population in the Region.

VII. CONCLUSION

59. Africa is approaching the 21st century with a cumulative epidemiological disease burden, made up of an increasingly heavy communicable diseases burden and a fast emerging non-communicable diseases burden. At the same time, the use of health technology to improve the quality of care is yet to be strengthened. To address all these challenges, there is a need for effective and rational mobilization of all resources available at country and regional levels. In this context, the development and implementation of comprehensive and consistent health technology policies and plans are critical, if not decisive, to improve health care services while containing costs and reducing dependence.