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Essential health technologies

Report by the Secretariat

1.   Health technologies are all the resources used in order to meet the health needs of healthy or sick people, either individually or collectively, including medicines, medical equipment and devices, medical procedures, and the organizational models and support systems employed.

2.   Health technologies are essential when they make a decisive contribution to attaining the internationally agreed health-related development goals, including those contained in the Millennium Declaration and when, through a dynamic process, they are adapted to the needs and epidemiological, demographic, cultural, ethical, legal and economic context of Member States. They must be safe, effective, based on evidence and comply with national and international standards; they are fundamental elements of health systems and, from the simplest to the most advanced, form the cornerstone of medical care, making it possible to provide preventive, diagnostic, treatment and rehabilitation services.

3.   A considerable proportion of the funds spent on new developments in health worldwide is used to acquire technologies, many of which are for use in primary health-care systems. WHO's Commission on Macroeconomics and Health reported that investment by developing countries in building basic health-care services, including the incorporation of reliable and safe health technologies, will be of huge benefit to health.[1]

4.   Effective use of essential health technologies by Member States also means ensuring the availability and proper use of effective and safe products and providing good-quality services operated by trained personnel.

THE NEED FOR HEALTH TECHNOLOGIES

5.   A large proportion of the world's population lives in poverty and lacks proper access to the health solutions that safe and reliable technologies can offer. However, essential health technologies make a vital contribution to narrowing the gap between poor and rich countries and to reduce inequity within countries.

6.   Health technologies often fall short of quality standards and are not always suited to countries whose resources are limited. Many national programmes face additional challenges, such as deficient

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[1] *Macroeconomics and health: investing in health for economic development.* Geneva, World Health Organization, 2001.

care networks and weak regulatory authorities. Lack of adequate infrastructure, together with inappropriate and poorly maintained equipment and insufficient human resources, further increases inequities.

7. Although millions of dollars are spent each year on a wide variety of medical devices, most countries have still not acknowledged that evaluation and management of health technologies is an integral part of public policies. Almost 95% of medical technology in developing countries is imported and is unsuited to the needs of national health systems.

8. The Millennium Project Task Force on child Health and Maternal Health has urged that structural changes should be made in health systems in order to improve the assignment of resources to underserved areas in order to attain the Millennium Development Goals. Many primary rural hospitals and health centres in developing countries have neither trained specialists nor the resources to provide essential care for life-threatening conditions. Each year, more than five million people die as a result of injuries – almost one out of every 10 deaths – and tens of millions of people use emergency services. Each year, almost 500 000 women die from pregnancy-related complications. A high proportion of deaths and disabilities could be prevented by improving access to clinical procedures which primary health-care services can provide if they have trained personnel, equipment that is suited to local needs and proper techniques.

9. eHealth and the use of telemedicine make it possible for remote and isolated primary health-care services to have access to specialized services. This could significantly improve diagnosis and treatment of patients and help to reduce the isolation of health professionals. Computerized systems of patient care improve the quality of services, are cost effective, and have a significant social impact. Distance-learning tools designed for health professionals and the general public may be channelled towards primary health-care services through public portals, compact disks, and products specially designed for remote education.

CHALLENGES

10. The main challenge is to improve health and reduce morbidity and mortality by making available, and ensuring the safe and proper use of, essential health technologies within health systems. Access to safe and affordable health technologies is vital if countries are to satisfy the expectations of their population and ensure fairness of financial contribution.

11. The shortage of trained medical personnel is frequently a barrier to the provision of effective health-care services. In some countries, nurses, health technicians and other health personnel are obliged to take on roles that elsewhere are assigned to physicians. This makes it all the more important for the choice of health technologies to be determined by the primary needs of patients and by the level of service that can be provided by the human resources available. There is also a need for greater interdisciplinary collaboration to evaluate essential health technologies.

12. Ensuring the sustainability of services and preserving access to health technologies must be a constant concern. In the developing world as a whole, between 40% and 60% of medical equipment is unusable for lack not only of financial resources, but also of a maintenance policy and of trained personnel.

13. Use of some health technologies may carry a certain risk for patients' health, for medical personnel and for the general public. Ensuring their quality, safety and efficacy requires good manufacturing and regulatory practices, not to mention before- and after-sales surveillance, together with measures to restrict their inappropriate use, and with technology surveillance.

14.   The acquisition and use of essential health technologies should be determined by the needs of patients and by the best evidence available, not by pressure for technological development or from **market forces**.

OPPORTUNITIES

15.   Improved surveillance offers an opportunity for guiding use of health technologies where regulatory bodies are lacking. Medical devices also require monitoring for adverse effects, similar to that applied to medicines and vaccines. Surveillance technologies are designed to improve products and prevent such effects. Application of innovative technologies or optimum use of existing ones in resource-scarce environments has encouraged creativity and a culture pf preservation and better management of resources. In some cases, such approaches have subsequently been adopted globally. Conversely, information produced by some Member States or WHO collaborating centres may be useful in such settings, where it could be shared via information and communication technologies.

THE WAY AHEAD

16.   In order to make optimum use of technologies in health systems needs should be defined in terms of operational subcomponents so as to establish levels of safe and reliable services, on the basis of the available technology. These subcomponents should cover elements such as effectiveness, quality, safety, availability and access, and take into account standards, norms and guidelines such as those provided by WHO.

17.   Countries need to recognize the role of essential health technologies vertical and horizontal programmes and plan their use within a sectoral approach. However, in order to be used effectively, health technologies should be adapted to the national context, and not merely copied.

18.   Priority should be given to strengthening and expanding those institutions that develop synergy between biomedical research, teaching and practice.

19.   Assessment of progress in use of health technologies, should take into consideration countries' basic epidemiological and demographic data; needs in respect of health technologies; indicators of the availability of technologies; equipment in health-care units; and application and use of technologies; capacity to train specialized human resources; and resources available for the operation and subsequent development of health technologies.

20.   In order to face current challenges and enhance the use of essential health technologies, it is planned to update normative guidelines, define specifications, and prepare training material on essential health technologies; strengthen mechanisms for efficient data collection and dissemination to Member States; and to set up mechanisms to maintain and increase installed capacity and training in all areas relating to essential health technologies, including the adoption of good clinical practices.

ACTION BY THE EXECUTIVE BOARD

21.   A Member State will propose a draft resolution during the session.

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