Draft resolutions deferred from the Fifty-ninth World Health Assembly and the 118th session of the Executive Board

Essential health technologies

Report by the Secretariat

1. Health-related technologies are physical, biological or chemical devices, clinical procedures, and services that have been developed to improve health. They are considered to be essential when they are evidence-based, cost-effective and meet priority public-health needs. Medicines and vaccines, which belong to special subsets of health technologies, are not discussed in this report.

2. Health technologies are indispensable tools for health-care practitioners in their work on prevention, diagnosis, treatment and rehabilitation. However, the improper selection, management or use of such technologies may lead to a disproportionate rise in the costs of health-care delivery. For health care to have the greatest impact, particularly in countries with limited economic resources, priority should be given to the selection and procurement of essential health technologies, and both effective control of important health problems and achievement of the health-related Millennium Development Goals will rely heavily on their correct management and use.

ISSUES

3. Every day, more than 8000 generic medical device groups and several thousand registered care procedures are in use throughout the world,¹ and innovative technologies continue to emerge. The availability of technologies for use against a wide spectrum of health problems also presents the challenge to managers of prioritizing expenditure on key technologies according to their importance to public health. Each country needs to strike a balance between the largely supply-driven market in technology and the needs of the health system, based on the burden of disease. Both the health sector and individuals need to be protected against unnecessary expenditure and sub-optimal use of scarce resources.

¹ The approximate figures are derived for generic device groups from international collections such as the Global Medical Device Nomenclature and the Universal Medical Device Nomenclature System, and for procedures from the International Classification of Health Interventions, which contains about 1400 codes and which is based on the Australian Classification of Health Interventions containing about 6000 codes.
4. The global medical device market alone, currently worth more than US$ 150 000 million, is projected to grow to US$ 186 800 million by 2009, with a predicted steady expansion of between 4% and 5% annually within the foreseeable future. Expenditure on medical devices contributes to increased health-care costs, which have reached crisis proportions in many countries and are coming under close scrutiny from governments, health-care providers, insurers and consumers. Efforts to contain these costs, or at least slow their growth, have been largely unsuccessful, as they continue to outpace growth in gross domestic product.

5. Resources are often wasted on investments in health technologies that do not meet priority needs or are too complex, incompatible with the existing infrastructure and services, or too costly to maintain in service. This wastefulness can undermine the health service as a whole by draining off funds needed for other essential systems inputs. Resources may be further dissipated through irrational or incorrect use of technologies, staff shortages, inadequate training, or lack of consumables, spare parts or maintenance plans. The management of health technologies should be recognized as an integral part of public-health policy.

**CHALLENGES**

6. Assessment should be based on epidemiological and demographic data, indicators of availability and rates of usage of health technologies in health-care facilities, staff capabilities and the resources available for procuring and operating these technologies. Interdisciplinary collaboration will help to generate evidence-based information on national needs for health technologies, their suitability to meet identified needs and the cost-effectiveness of different procurement options. Given the limited availability of resources, the prioritization of needs will enable countries to select health technologies in terms of the burden of disease and the level of service that can be provided. Both the recognition of the cross-cutting role of essential health technologies and planning their use under a sector-wide approach are necessary also. In line with the spirit of the Declaration of Alma-Ata (1978), primary health-care facilities and first-referral-level hospitals should constitute a common base for essential health technologies.

7. The use of health technologies carries a certain risk for patients, medical personnel and the general public. In resolution WHA55.18, the Health Assembly emphasized the importance of improving patient safety and quality of care by strengthening the science-based systems used to assess and monitor medical equipment and technology. Good manufacturing and regulatory practices, pre-marketing evaluation and post-marketing surveillance, and measures to restrict inappropriate use will not only ensure the quality, safety and efficacy of medical devices but also contribute to the fight against counterfeit devices. Donated and second-hand equipment should satisfy the same requirements as new equipment acquired through normal procurement processes.

8. Ensuring the sustainability of services and maintaining access to existing health technologies must remain an important consideration, and need sound mechanisms for planning and assessment, acquisition and management of those technologies. Moreover, the health system also needs to be able to identify technologies that could have a major impact on public health and may quickly replace existing technologies.
THE WAY FORWARD

9. National policies are needed that cover all aspects of health technologies, but will be successful only if supported by regulatory mechanisms. Regulatory authorities should be grounded in legislation that defines the scope of their powers and their accountability. Regulations should specify that all medical devices, whether imported or locally produced, must meet international norms and standards in order to bring public-health benefits without harming patients, health-care workers or the community. In addition, countries should participate in global and local vigilance networks in order to ensure the effective management of adverse events.

10. National needs for health technologies should be defined in terms of effectiveness, quality, safety, cost-efficiency, availability and access in order to optimize their use and to establish safe and reliable services in health systems. Such needs assessments should take into account national and international norms, standards, guidelines and lists of essential health technologies.

11. The pursuit of the rational use of health technologies requires innovative, integrated and efficient methods of determining the technology appropriate for any level of the health-care delivery system. It also requires the establishment of systems for the assessment and management of both new and existing health technologies.

12. Effective use of health technologies requires strong collaboration and partnerships between governments, health-care providers, industry, patients’ associations, and professional, scientific and technical organizations. Priority should be given to strengthening and expanding those institutions that can work effectively with users to identify needs, undertake biomedical research in order to improve existing technologies or develop new technologies to meet those needs. Regional and national centres of excellence have a central networking role in the transfer of technology among countries.

13. Demand, availability, use and impact of health technologies will have to be monitored, with specific indicators, and a sufficient capacity to train specialized health workers and resources available for the operation, maintenance and subsequent development of health technologies will be necessary.

ROLE OF WHO

14. Through the development of guidelines and tools, WHO can provide support to Member States and donors in prioritizing their needs and allocating resources. Its experience in drawing up the Model List of Essential Medicines could be applied in creating a similar list of essential health technologies on the basis of universally recognized concepts and data such as WHO Global Burden of Disease studies, coding systems and databases. The list could serve to guide Member States in their choice of technologies required for the prevention, diagnosis, treatment and rehabilitation of patients with those diseases and conditions that pose the heaviest public-health burden. The development and maintenance of a list of essential health technologies would require continuing technical support of experts from a broad range of clinical specialties and from the field of health technologies.

15. Evidence-based assessments of established and new technologies are vital in order to ensure appropriate procurement and optimal use of essential health technologies, prevent the dissemination of inappropriate technologies and to avoid the use of ineffective or potentially harmful ones. WHO should be alert to technological breakthroughs in promoting public health and share information about them with all stakeholders using the unprecedented opportunities offered by advances in access to information and communication technology.
ACTION BY THE EXECUTIVE BOARD

16. The Executive Board is invited to consider the following draft resolution:

   The Executive Board,

   Having considered the report on essential health technologies,¹

   RECOMMENDS to the Sixtieth World Health Assembly the adoption of the following
   resolution:²

   The Sixtieth World Health Assembly,

   Having considered the report on essential health technologies;

   Understanding that essential health technologies are devices (physical, biological
   or chemical), procedures or services that have been developed to solve health problems
   and are considered essential if they are evidence-based, cost-effective and meet priority
   public-health needs;

   Recognizing that health technologies equip health-care providers with tools that are
   indispensable to effective and efficient prevention, diagnosis, treatment and rehabilitation
   and attainment of internationally agreed health-related development goals, including
   those contained in the Millennium Declaration;

   Understanding that health technologies represent an economic as well as a
   technical challenge to the health systems of many Member States, and concerned about
   the waste of resources resulting from inappropriate investments in health technologies
   that do not meet high-priority needs, are incompatible with existing infrastructures, are
   irrationally or incorrectly used, or do not function efficiently;

   Acknowledging the need for Member States and donors to contain burgeoning
   costs by establishing priorities in the selection and acquisition of health technologies on
   the basis of their impact on the burden of disease, and to ensure the effective use of
   resources through proper planning, assessment, acquisition and management,

1. URGES Member States:

   (1) to collect, verify, update and exchange information on health technologies
       that will contribute to drawing up an evidence-based list of essential health
       technologies as an aid to prioritization of needs and allocation of resources;

   (2) to formulate national strategies and plans for the establishment of systems
       for the assessment, procurement and management of health technologies;

¹ Document EB120/13.
² See document EB120/13 Add.1 for the administrative and financial implications for the Secretariat of this resolution.
(3) to draw up national guidelines for good manufacturing and regulatory practices, to establish surveillance systems and other measures to ensure the quality, safety and efficacy of procured and donated medical devices, and to contribute to the fight against counterfeit devices;

(4) to establish regional and national centres of excellence in health technology, and to collaborate and build partnerships with health-care providers, industry, patients’ associations and professional, scientific and technical organizations;

2. REQUESTS the Director-General:

(1) to establish a committee of experts on health technologies to assist in the development and maintenance of a WHO list of essential health technologies;

(2) to provide support to Member States in establishing mechanisms to assess national needs for essential health technologies and to assure their availability and use;

(3) to provide technical guidance and support to Member States in implementing national policies on essential health technologies;

(4) to designate centres of excellence as WHO collaborating centres to advise on norms, standards and guidelines on essential health technologies;

(5) to work jointly with other organizations of the United Nations system, international organizations, academic institutions and professional bodies in order to provide support to Member States in the prioritization, selection and use of essential health technologies;

(6) to report on implementation of this resolution to the Sixty-second World Health Assembly.