

RECOMMENDATION ITU-D 11

**Impact of telecommunications in health-care
and other social services****Question 6/2: *Impact of telecommunications in health care and other social services***

The World Telecommunication Development Conference (Valletta, 1998),

recognizing

- a) that the first requirement of developing countries is for more information about telemedicine, what it is and how it might be able to help solve some of their problems in medical and health care;
- b) that, unlike Europe, Canada, the United States and Japan, few developing countries have any experience in the application of telemedicine, even in urban areas equipped with telecommunication infrastructures;
- c) that there is, nevertheless, an overwhelming need for the provision of medical and health-care services, especially in areas outside the cities,

being of the view

- a) that telemedicine services could be an economical means of achieving national health-policy objectives with regard to improvement and/or extension of medical and health care, especially to non-urban areas;
- b) that telemedicine services and delivery in developing countries should be affordable, practical, self-sustaining and available to as many people in need as possible;
- c) that few developing countries can afford the very sophisticated telemedicine solutions involving ATM, virtual reality, etc;
- d) that their most pressing need is for low-cost telecommunications and associated facilities for telemedicine applications,

considering

that those responsible for health-care planning may wish to take telemedicine into account within the framework of national health policy and that planners should consider at least four aspects of health care where telemedicine could play a role:

- 1 *Administration*: Telemedicine could help in the administrative tasks involved in implementing national health-policies, which is currently a problem in many developing countries;
- 2 *Reinforcing national health structures*: Telemedicine could help improve linkages between rural district hospitals and the main national hospitals using telecommunications;
- 3 *Education*: Telemedicine services could help provide training and education to health-care professionals in rural areas;
- 4 *Quality and efficiency of health-care services*,

considering also

- a) the importance of establishing a national telemedicine policy and/or strategy, in the context of a national “health for all” policy;
- b) that such a policy or strategy could identify health-care priorities and include consideration about how telecommunication facilities for telemedicine can be funded, whether by government, by industry, as part of universal service obligations for telecommunication operators or by other means;
- c) that the medical profession should take the lead in determining their needs and how telemedicine might help;
- d) that doctors and other health-care professionals might be able to identify needs, but implementation of telemedicine requires multidisciplinary collaboration, with the active participation of telecommunication operators,

recommends

- 1 that national ministries of health and ministries of telecommunications be encouraged, therefore, to work together towards introduction of a telemedicine policy;
- 2 that telecommunication operators be encouraged to take an active interest in telemedicine as a potential business opportunity, and that telecommunication operators and telemedicine experts, equipment suppliers and service providers be also encouraged to work together;
- 3 that developing countries interested in telemedicine should support the guidelines contained in the *Report on Telemedicine and Developing Countries*;
- 4 that developing countries should consider undertaking some telemedicine pilot projects, especially involving rural and remote areas, in order to help identify the most cost-effective telecommunication solutions for the provision of health care, especially to those living in remote and rural areas. The second African Regional Telecommunication Development Conference (AR-RTDC-96) recognized that it would be desirable to see at least two large-scale trials of telemedicine somewhere in Africa which would serve as “test beds” and as models for the successful implementation of telemedicine in other developing countries. The first World Telemedicine Symposium for Developing Countries (Portugal, 1997) also concluded that while large-scale trials, as recommended by AR-RTDC-96), would be useful, a number of small pilot projects should be initiated in developing countries at the earliest opportunity;
- 5 that, while there are various national, regional and international organizations from which some funding for telemedicine projects can be sought, developing countries should endeavour to ensure that telemedicine services are self-sustaining in the medium to long term in order to avoid raising false expectations; developing countries should share the results of their experiences so as to identify the most appropriate, cost-effective and sustainable solutions;
- 6 that there is a need for some quantitative analysis based on actual telemedicine experience, for example, from pilot projects, which could demonstrate to policy-makers and funding bodies the cost-benefits of telemedicine; on the basis of such an analysis, politicians could be encouraged to devote a percentage of the health-care budget to telemedicine and to solicit matching funds from the large funding institutions such as the World Bank;
- 7 that there is a need to bridge the gap between the telecommunication and health-care communities at all levels; consequently, ITU and WHO should further enhance their links and collaboration, promote collaboration between their respective constituencies and identify solutions to meet health-care needs, especially in remote and rural areas, for those on the move and for those who might not otherwise have access to the quality of care available in urban hospitals;
- 8 that ITU/BDT should take further steps to raise the awareness of decision-makers, telecommunication operators, donors and others about telemedicine and how it might be able to help solve some health-care needs; wide dissemination of the Telemedicine Report could help in this regard;

9 that ITU-D Study Group 2 should bear in mind that:

- a) telemedicine workshops or symposia are another useful means of raising awareness and bringing together representatives from the telecommunication and health-care sectors, from developed and developing countries;
- b) ITU/BDT was requested by the African and Arab States Regional Telecommunication Development Conferences to organize a workshop or seminar on telecommunications for telemedicine in order to consider and review the Telemedicine Report, to consider the modalities for implementing telemedicine, to share experience and ideas, especially in regard to the costs and benefits of telemedicine, and to foster the adoption of global solutions;
- c) as a result, ITU/BDT convened the first World Telemedicine Symposium for Developing Countries in Portugal from 30 June to 4 July 1997 which, in turn, recommended that another such symposium be held in Latin America in 1998;

10 that ITU should also establish a database which could be updated annually and which would provide a source of information about the different pilot projects in developing countries, what financing mechanisms and technologies have been used, what services have been provided, what the results of the pilot projects have been, what lessons to learn, what mistakes to avoid;

11 that ITU/BDT should help developing countries by identifying appropriate telecommunication technologies and applications for telemedicine and to show how, through effective use of telecommunications, telemedicine can optimize the use of the limited human health-care resources in developing countries.
