RECOMMENDATION ITU-D 11-1

Impact of telecommunications in health-care and other social services

(January, 2002)

Question 14/2: Fostering the application of telecommunication in health care. Identifying and documenting success factors for implementing telemedicine

The ITU-D,

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 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 telemedicine¹ services could be an economical means of achieving national healthpolicy 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 ITU-D Study Group 2 adopted this recommendation without agreement on the use of the terms "telemedicine", "e-health" or "telehealth". The choice of one of these terms was submitted to TDAG in October 2001, which decided to retain "telemedicine" and leave the final choice to WTDC-02.

- a) Administration: Telemedicine will help in the administrative tasks involved in implementing national health-policies, which is currently a problem in many developing countries;
- b) Reinforcing national health structures: Telemedicine will help improve linkages between rural district hospitals and the main national hospitals using telecommunications;
- c) Education: Telemedicine services could help provide training and education to health-care professionals in rural areas;
- d) 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 continue to work together towards introduction of a telemedicine policy;
- that telecommunication operators continue taking 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 continue working together;
- that developing countries interested in telemedicine should support the guidelines contained in the *Report on Telemedicine and Developing Countries*;
- 4 that developing countries should continue considering the undertaking of 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;
- 5 that, while there are various national, regional and international organizations from which some funding for telemedicine projects can be sought, developing countries should endeavor 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;

- 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;
- 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 continue raising 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 will help in this regard;
- 9 that ITU-D Study Group 2 in the next cycle should bear in mind that telemedicine workshops or symposia were useful means of raising awareness and bringing together representatives from the telecommunication and health-care sectors, from developed and developing countries; this should continue;
- that ITU/BDT should also improve its data base on a yearly basis thus providing 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;
- that ITU/BDT should continue helping developing countries by identifying further 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.