

QUESTION 2/2

Information and telecommunications for e-health

1 Statement of the situation or problem

E-health is an integrated system of healthcare delivery that employs telecommunications/ICTs as a substitute for face-to-face contact between medical staff and patient. It includes many applications, such as telemedicine, electronic medical records, medical consultation at a distance, medical consultation between rural medical centres and urban hospitals, etc. E-health provides for transmission, storage and retrieval of medical information in digital form between doctors, nurses, other medical staff and patients for clinical, educational and administrative purposes, both at the local site (your workplace) and at a distance (remote workplaces). In some developing countries¹, the number of mobile phones has overtaken the number of fixed phones, and the mobile telecommunication network could be considered a more attractive platform for the introduction of e-health services.

E-health is playing a very important role in healthcare delivery in developing countries, where the acute shortage of doctors, nurses and paramedics is directly proportional to the enormous unsatisfied demand for health services. Some developing countries have already successfully implemented small pilot telemedicine projects, and they are looking forward to proceeding further by considering the development of e-health master plans, as recommended by the World Health Organization in its Resolution WHA58.28 in May 2005, which aims, in particular, at reducing disparities with regard to medical services between urban and rural areas and pays special attention to the least developed countries (LDCs).

2 Question or issue for study

The Question shall:

- a) Take further steps to assist in raising the awareness of decision-makers, regulators, telecommunication operators, donors and customers about the role of ICTs in improving healthcare delivery in developing countries.
- b) Encourage collaboration and commitment between the telecommunication sector and the health sector in developing countries, in order to maximize the utilization of limited resources on both sides for implementing e-health services.
- c) Continue to disseminate experiences and best practices with the use of ICTs in e-health in developing countries.
- d) Encourage cooperation among developing and developed countries in the field of mobile e-health solutions and services.
- e) Promote the development of technical standards for e-health applications in conjunction with ITU-T. In particular, develop guidelines for developing countries on how to use such standards.
- f) Introduce and disseminate ITU technical standards related to e-health for developing countries.

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

3 Expected output

The outputs expected from this Question will include:

- a) Guidelines on how to draft the telecommunication/ICT part of an e-health master plan.
- b) Guidelines with regard to the use of mobile telecommunications for e-health solutions in developing countries.
- c) Collection and summary of the requirements and effectiveness of telecommunication infrastructure for the successful implementation of e-health applications, taking into account the environment of developing countries.
- d) Dissemination of the technical standard related to the introduction of e-health services in developing countries.
- e) Collaboration with ITU-T Study Group 16 in order to accelerate the elaboration of technical standards for e-health applications.
- f) Collaboration with the relevant BDT programme, if so requested, to support implementation of the telecommunication/ICT component of e-health projects in developing countries, including advice on best practices on how to train developing countries in the use of the telecommunication/ICT component of e-health projects.
- g) Sharing and dissemination of best practices on e-health applications in developing countries using the ITU/BDT website, in close collaboration with the relevant BDT programme.

4 Timing

The work undertaken by the study group can be phased over the next study period. The participation of experts from the group for the provision of assistance in the development of e-health projects in developing countries will be encouraged.

5 Proposers/sponsors

The Question was originally approved by WTDC-98, and subsequently revised by WTDC-02, WTDC-06, WTDC-10 and WTDC-14.

6 Sources of input

Inputs will be expected from Member States and Sector Members, experts in e-health applications, etc. Contributors and contacts have already been established during the 2002-2006, 2006-2010 and 2010-2014 study periods, and new contacts will be invited, too. This Question supported the mobile e-health initiative for developing countries launched in 2009.

7 Target audience

Target audience	Developed countries	Developing countries ¹
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes
ITU-D programme		
Ministries of health	Yes	Yes
Medical organizations	Yes	Yes
NGOs in the field of health	Yes	Yes

This Question aims at stimulating collaboration between the telecommunication/ICT and health communities, between developed and developing countries, and among developing countries. The experience gained from telecommunications/ICT for e-health applications in developing countries will also be expected to benefit equipment suppliers and service providers in developed countries.

a) Target audience – Who specifically will use the output

Telecommunication/ICT and health communities, between developed and developing countries and among developing countries, as well as telecom regulators manufacturers, medical organizations, NGOs and service providers.

b) Proposed methods for implementation of the results

Within Study Group 2. The outputs of this Question will be made available via the ITU-D website.

8 Proposed methods of handling the Question or issue

a) How?

- 1) Within a study group:
 - Question (over a multi-year study period)
- 2) Within regular BDT activity (indicate which Programmes, activities, projects, etc., will be involved in the work of the Study Question):
 - Programmes: ICT applications and services
 - Projects
 - Expert consultants
 - Regional offices
- 3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.)

b) Why?

To take into account the ongoing/planned programmes/regional initiatives and optimize resources.

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

9 Coordination and collaboration

Coordination between the telecommunication/ICT and health communities, between developed and developing countries and among developing countries, as well as telecom regulators manufacturers, medical organizations, NGOs and service providers.

10 BDT programme link

Programme: ICT applications and services (Output 3.2)

11 Other relevant information

The activity for the next study cycle can be based on the final report, and on other initiatives which resulted from Question 14-3/2 of the last study period, namely mobile telecommunications for mobile e-health.