Telemedicine Alliance

TELEMEDICINE 2010:
VISIONS FOR A PERSONAL MEDICAL NETWORK

ESA   European Space Agency, European Space Research & Technology Centre (ESTEC), Noordwijk, Netherlands
WHO   World Health Organisation - European Office for Integrated Health Care Services, Barcelona, Spain
ITU   International Telecommunication Union: Technologies and Network Development Unit, Geneva, Switzerland

Summary of Final Report

Introduction

The TM Alliance (or Telemedicine Alliance) consortium comprises the European Space Agency (Noordwijk), the World Health Organisation (Barcelona) and the International Telecommunication Union (Geneva). This alliance is supported by the EC Information Society DG. The results of the 1st phase[1] of the TM Alliance's work are presented here in summary form.

The objective of the first 1st phase of this project was to formulate an overlying policy for the application of telemedicine in support of, primarily, the European citizen by the year 2010. The strategic goal is the improvement of public health and quality of life, adapting to changing needs and utilizing existing and new technological capabilities, while at the same time increasing the efficiency and cost-effectiveness of these services.

The subject of health of the citizen has been, and will continue to be, critical to the EU Member States. The conversion from traditional health strategies to eHealth is a giant, but inevitable, step, for which the EU Health Ministers have given their unequivocal backing.

The TM-Alliance (TMA) thoroughly examined existing documentation of the development of digital supported health services in Europe and internationally hereof, notably in the areas of health cards, electronic health records, electronic prescribing and IT-support of telemedicine. The TMA had consultations with representatives of national and regional governments, health service providers, vendors and standardisation bodies, in order to glean their expert and representative opinions.

The TMA has formulated a Vision, recently submitted to the EC, that we believe will address the problems encountered in healthcare provision across Europe. This will put the citizen in the rightful place of being the centre of policymaking and healthcare provision, and will make him benefit from the rights that are granted to him in the Internal Market

Vision

The TMA' s Vision is of Citizen-Centred healthcare across Europe, where services are centred around the citizen rather than on the healthcare provider or other stakeholders, and where the citizen can easily receive this care wherever and whenever it is needed.

TMA Vision for Citizen-Centred Healthcare

The Vision created. illustrated in the figure above, has as its basic tenet that the citizen should become the focus of the healthcare system and be in a position to control his/her own care plan. It was concluded that eHealth systems have the capability to significantly enhance this proposed move towards citizen-centred healthcare.

The key to the success of this move will be the creation of a network of data repositories associated with the citizen and used by the principle healthcare "actors". Via this eHealth system the citizen will be able to interact with providers of healthcare, receive education and be empowered to take greater control of their own health and healthcare.

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[1] *EC Project N°. IST-2001-35026, (July 2002-December 2003)*

The collected data will enable better planning and assessment of preventive measures and individual cases or care plans. It will enable the citizen to be a partner with their healthcare professionals in making choices amongst available treatments. Finally, it provides the basis for payment/re-imbursement systems.

Prerequisite to the transition to eHealth is a solid basis for interoperability across its entire domain, namely eCare, eLearning, eSurveillance, and eAdministration.

Finally, success of the Vision very much depends on the trust of both citizen and healthcare professional, for which there must be adequate guarantees for authentication, security and confidentiality so that data is both legally and medically appropriate to the potential user.

Driving Forces for the Vision

Some of the driving forces for this Vision are well known:

An aging population: Because of demographic trends towards older age, more citizens will have one or more life-restricting conditions or chronic illnesses for which this model is particularly adapted (homecare).

Quality-of-care and care delivery: Unnecessary repeated tests, too many fatal errors, limited possibilities of 'hospital-at-home' type care, are only a few of the driving forces for eHealth.

Cost: The rising cost of healthcare has become a critical problem throughout Europe. This situation begs for more efficient organisation as well as the added capabilities offered by virtual access via Telemedicine technologies.

Mobility: The TMA-Vision for eHealth is particularly in the EU where there is increasing intra-European mobility of the population in tandem with the increasing internationalisation of companies and organisations and the disappearing borders between States.

Technology: Although the reasons for realizing the Vision are not, and should not be, technology-driven, the ubiquity of communications and information technology and the resulting expectations nurtured by this predestines society increasingly towards eHealth.

Consumerism: As with most other services in today's society, healthcare cannot continue to escape the expectations of increasingly informed and demanding patients.

In the TMA's Vision new services and added values will be able to emerge for the advancement of knowledge and care, for education and prevention, and for social services and more efficient warning system. In addition, more and more scientists and health care providers are convinced that continuous medical monitoring and care is mandatory rather than episodic

Impediments

The road to realization is strewn with impediments and roadblocks. Cost is often seen as a major impediment, although it should rather asked whether society can afford not to act. In fact other impediments are more real, such as lack of interoperable standards, fear of change, fear of alienation of the medical service, the business case for Tele-support, and the missing electronic health record.

Realising the Vision

The TMA vision is addressed to decision makers and other bodies and citizens, who can make it possible:

➢ *Empower citizens and patients*
➢ *Improve and support equal access to care*
➢ *Build capacity of the health professionals*
➢ *Increase quality and cost/efficiency*
➢ *Reduce burden of travel for patients*
➢ *Support decision-making by improving information systems and surveillance*
➢ *Keep pace with and make use of the same infrastructures as will be provided by the other sectors of eEurope*
➢ *Overcome dominating barriers of political, professional and economic nature.*
➢ *Coordinate legislation on the use of electronic media now, as well as define financing and reimbursement systems.*
➢ *Promote and foster worldwide standardization and interoperability*

Follow-up Project: TMA-Bridge

The 2nd phase of our work with the EC: *"TM-Alliance - A Bridge Towards Coordinated eHealth Implementation"*, is aimed at promoting the creation of European eHealth Area, favouring the mobility aspects in the European Union. To do so the project will tackle the barriers to the achievement of a real mobility space for EU citizens, concentrating especially on technical, organisational, social and political interoperability of Health Systems.

To learn more about the TM-Alliance

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