

# Volume 1 / Issue 2 Summer 2006 - Cover Story

## Interoperable eHealth for Europe

### Authors

### **Arnaud Runge**

Title: Biomedical Engineer

Organisation: European

Space Agency

Email: Arnaud.Runge@esa.int

Website: www.esa.int/telemedicine-alliance

#### Cristina Bescos

Title: TMA-Bridge Project Manager

Organisation: Consultant for the European

Space Agency

Email: <a href="mailto:cbescos@gmail.com">cbescos@gmail.com</a>

Website: www.esa.int/telemedicine-alliance

#### **Marie Diop**

Title: Policy & LawSupport

Organisation: European Space Agency

Email: Marie.Diop@esa.int

Website: www.esa.int/telemedicinealliance

# James Kass

Title: Senior Scientist

Organisation: European Space Agency

Email: James.Kass@esa.int

Website: www.esa.int/telemedicine-alliance

### **Didier Schmitt**

Title: Head of Life Sciences Unit

Organisation: European Space Agency

Email: Didier.Schmitt@esa.int

Website: www.esa.int/telemedicine-alliance

For a copy of the references contained in this article, please contact

k.ruocco.me@eahitm.org.

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.



LALA VISION for Citizen-Centred eries

#### The TM Alliance

In 2002, the European Space Agency (ESA), the World Health Organisation (WHO) and the International Telecommunication Union (ITU), under the auspices of the European Commission (EC), initiated a unique partnership in eHealth: specifically, to build a vision for the provision of telemedicine to European citizens by 2010. This partnership was called the Telemedicine Alliance1.

During its first phase of work - Phase-I: TM Alliance (Build the Alliance and analyse the terrain), a vision for citizen-centred eHealth services by 2010, was formulated. This vision presents a network of healthcare systems centred, not only around the healthcare providers, administrators, decisionmakers, or other powerful interest groups, but around actively demanding European citizens. Akey outcome of this study2 phase was that a major obstacle to implementation of eHealth was the issue of interoperability3 in its broadest meaning4.

#### TMA-Bridge: Building the Bridge to Implementation

Having identified interoperability, in Phase-I, as being a major obstacle to the development of eHealth in Europe, this was chosen as the main theme for Phase-II. In this phase, TMA took up the challenge of planning a strategy that would bring the Vision one step closer to reality, thus the name of this phase: "TMA-Bridge - building the bridge between the present state and the future state." The goal of achieving transnational interoperability is illustrated in the figure above, where services and dataexchange move freely across borders, even between very different healthcare systems. Rather than make high-level recommendations associated with the desired end goals, TMA took it upon itself to identify a set of concrete actions of limited scope, which if carried out, would each help and serve as a basis and catalyst towards further progress along the difficult road towards the realisation of citizen-centred transnational eHealth in Europe.

To reach this goal, TMA called together two workshops of experts representing the various stakeholders of eHealth, where the key problems of interoperability were discussed and recommendations were worked on and reviewed. In line with TMA's philosophy of approaching these issues holistically, an attempt was made to span all frameworks of eHealth, including political, organisational, social, and technical. Implementation of mutually complementary perspectives will ensure reasonable progress and optimise the timing for the process change. The expected involvement of the European Parliament and the Council of Ministers, the inclusion of eHealth in developments of eEurope, and adequate financial commitment are underlying conditions in order to place the issue of transnational interoperability as a high priority for decision-makers. The resulting concrete recommendations are considered to be necessary steps that will help the eHealth community come closer to achieving its goal and serve as catalysts for future actions.

The following summary of the recommendations are reproduced from the TMA-Bridge Final Report1 and are addressed to the EU Council of Ministers, the European Commission, the national Ministers of Health, the European Parliament, and all those from the eHealth stakeholder community who are able to take action:

### Political Perspective

- 1. Take legal and regulatory action.
- a. Develop a legal framework (common guidelines) for health data transfer.
- b. Bring Member State's confidentiality and privacy laws into harmony, especially regarding health data.
- c. Develop a clear statement on the legal liability for treatment both to cover bilateral and European-wide agreements.
- 2. Create and implement a framework for monitoring and evaluation, to measure progress towards meeting transnational citizen's needs.

## Organisational & Social Perspective

- 3. Develop a workflow model that will incorporate organisational and social models into transnational systems so that clear and unambiguous guidelines can be developed for all aspects of transnational eHealth.
- 4. Create an environment for sharing knowledge of proven (good) practice and build the knowledge and capability of health professionals © For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

- 5. Create the facilities and the content to ensure that eligibility to receive treatment and reimbursement, can be known at the point and time of care, by the patient and the care provider.
- 6. Ensure that relevant data, in electronic form, is available to the treating healthcare professional and citizen.
- 7. Ensure that language and cultural differences are incorporated into the system and available at the point and time of care.

#### **Technical Perspective**

- 8. Create a European telecommunications infrastructure as part of the eEurope initiative, which will provide the technical support for the transmission of data in a manner conforming to the data protection legislation in place, and whichmeets the needs of eHealth.
- 9. Incorporate a set of value-added applications into the infrastructure, by identifying and implementing a set of achievable key applications.
- 10. Develop a central access point for health information standards, by establishing one access point for health information standards for the semantic content, coding classification and ontologies.
- 11. Increase awareness of the importance of existing interoperability-related standards for eHealth, by ensuring that data-interchange standards are known, understood and implemented in both supplying and procuring organisations.



By publishing these recommendations, TMA is challenging decision-makers to take concrete action towards achieving the longterm vision of truly citizen-centred healthcare that attempts to resolve artificial obstacles such as problems of interoperability, national boundaries or distance. There many more proposed recommendations, and certainly those selected are only a subset: but by keeping them to a small number, it is hoped that action can and will be taken. The selection was based on the highest impact for all key players involved. Implementation of these measures, and the resulting impetus thus given to transnational eHealth should galvanise European Industry and the European Health Care Organisations to increased action and initiative.

The ultimate goal of achieving interoperable eHealth will not only enable growth of transnational European cooperation and foster the growing group of transnational European citizens, but also strengthen the hand of European industry and catalyse innovation, thus enabling Europe and Europeans to assume their rightful place, role, and responsibilities incumbent upon them on the world stage.

Published on: Sun, 16 Jul 2006