Towards a framework for Cyber-Health standardization in Mexico

Arturo Serrano-Santoyo
CICESE Research Center
Ensenada, Baja California, Mexico
Introduction

- It is particularly relevant the role of standardization in a complex and highly globalized and converging context.
- National ICT regulatory administrations of emerging economies are committed to consolidate and strengthen their standardization processes and policies.
- According with the ITU’s Strategic Plan for 2008-2011, two elements are crucial to accomplish participation of developing countries in standardization matters:
  - Bridging the Digital Divide
  - Training and capacity building
Challenges

- One of the challenges of regulatory authorities to develop a comprehensive national standardization working frame is to understand the convergence and complexity issues involved, not only the technical elements, but the
- Cultural, Contextual, Developmental and Transdisciplinarity factors.
- The case of Cyber-Health provides an opportunity to generate and stimulate participation of developing countries in standardization matters.
- This is particularly important for emerging economies in search of strategically positioning the country in a globalized economy.
The case of Mexico

• The ICT regulatory administration has acknowledged the importance of standardization to advance the competitive indicators of the country.

• The national health institutions acknowledge the need of standards that include information technology elements in the medical practices.

• The pressing need of improving the quality and coverage of medical services, particularly in remote and under-served locations represents an important opportunity to develop a comprehensive standards framework for Cyber-Health.
The case of Mexico

Three elements are key:

• The deployment and expansion of the e-mexico program

• The publication in 2010 of two national standards involving the adoption of Electronic Health Records and the Federal Law for data personal protection.

• The creation of the Mexican Space Agency
The case of Mexico

For the development of a comprehensive Cyber-Health standardization framework for Mexico, we propose the following steps:

• The evaluation of the country’s national standards capability through the application of the ITU’s Tool for Assessing the Standards Capability (TASC).

• The development of a transdisciplinary educational program to generate in the short term the human resources required to accelerate the participation of the country in standardization initiatives.

• To understand the Digital Value Chain involved in Cyber-Health
The case of Mexico

Our proposal will require the collaborative work of IT research institutions, the Mexican Space Agency, public and private health institutions and physicians and more importantly, the contribution of civil society of urban and rural locations. Basic elements of the framework will include, among others:

• A sustainable development vision

• Addressing National Security concerns

• Transdisciplinary approach in the participation of the national standards bodies

• Adoption and usability factors
Conclusions

Without a comprehensive framework for Cyber-Health services in developing countries, the role of ICT and space technology as vehicles for human development will be elusive and an important opportunity to participate in the definition and creation of standards of global impact will be lost.

The experiences of developing countries in the provision of Cyber-Health services in rural and under-served areas is very important, the development of a national standards framework for Cyber-Health supported by all the regulatory agencies involved is seen as a fundamental step in the transit of those countries toward the knowledge society.
Dr. Arturo Serrano-Santoyo
serrano@cicese.mx