Diagnosis of the status of telehealth in Ecuador

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COMPONENT 1: STANDARDS

- Does the country have a national policy for standards for the Communication Technology and Health Informatics areas (Health Informatics and Telehealth)? If yes, does it have any internet site? Which are the standards on Health Informatics and Telehealth used in the country? Which are the needs for Telehealth standards in the country?

Not as a country. Institutions/organizations with some experience on telemedicine/telehealth have adopted the standards they have considered convenient, either by the advice given by the country or by the body that provides them with financial and technical support.

The needs for Standards in the country are as follow:

- Competence, responsibilities and limitations of healthcare staff practicing telemedicine;
- Quality, safety and protection of the information sent;
- Equipment, compatibility and interoperability;
- Connectivity: features, band width, link capability, etc;
- Computerized medical records;
- Bioethics and confidentiality;
- Informed consent;
- Reference and counter-reference methods;
- Indicators and criteria for telemedicine practice and assessment, follow up, monitoring and feedback;
- Protocols for handling diagnosis images and exams;
- Ecuador has the National Telemedicine / Telehealth Policy, Model and Plan, published in March 2010, access link: http://dspace.cedia.org.ec/bitstream/123456789/68/1/Telemedicina_MSP.pdf.

- Does the country take part in International groups/studies of standard producing organizations (ISO/TC215 Health Informatics, HL7, DICOM, IEC, IEEE)? Is participation individual or at the government level?

Ecuador does not appear as member of ISO/TC215 Health Informatics technical subcommittee, but it appears among observation nations (Governmental), together with Argentina.

HL7, DICOM, IEC, IEEE: No

- Which is the government or civil institution belonging to the national system of standardization and also recognized by ISO? Is this institution also organized to produce standards on health informatics and telehealth?

The government institution belonging to the National Standardization Institute is the Ecuadorian Standardization Institute (INEN, in Spanish).

INEN is the body responsible for issuing technical standards according to the organic law of the Ecuadorian system on quality. INEN keeps contact with ISO, and this is why it is a recognized entity.

It has the authority to produce all standards and it can do so directly or coordinating it through National Technical Committees.

Other entities, mainly ministries, are able to develop standards in their sphere of activity.

As far as we know at the moment, INEN does not have the organization to produce standards on health informatics or telehealth.

With regard to healthcare, INEN establishes standards

on products, in order to avoid negative impacts on the health of customers; it also supports the Consumer Law.

The Ministry of Health is in charge of topics related to health informatics and telehealth. Therefore, it is very difficult for other entity to go into its sphere of activity.

- Which is the role of the Ministry of Health in the country regarding standardization? Is its role more of a regulator using standards produced nationally and internationally by other institutions or is it also the producer of technical standards? How is the Ministry of Health currently organized regarding health informatics and telehealth issues? Please explain.

It has a regulating role and as such, it participates as a producer of technical standards related to health.

- Technical standards production processes follow an open building process with the participation of producers, consumers and neutral groups (universities and government)? Please describe.

The production of standards is done through National Technical Committees, where all stakeholders are included, especially those with technical capability and of course those who use the standard as well as the controlling authorities, when needed.

The Ecuadorian System Law on Quality stated in its:

Art. 15. The Ecuadorian Standardization Institute – INEN will have the following functions:

a. To carry out functions of the competent national technical body on regulation, standardization and measuring, established in the laws of the Republic and on international treaties and agreements;
b. To formulate, after due technical analysis, on their responsibility areas the proposals of standards, technical regulations and procedures of conformity assessment, the working plans, as well as proposals of standards and measuring procedures;
c. To promote programs to address quality improvement and to support promotion activities carried out by third parties, when necessary;
d. To prepare a National Standardization Plan supporting the preparation of technical regulations for products;
e. To organize and run national Networks or subsystems regarding standardization, technical and measuring regulation;
f. To offer technical services on their responsibility area;
g. To act as an assessment entity of competent conformity at the national level, subject to accreditation, certification and/or appointments;
h. To approve, adapt or adopt international standards;
i. INEN will coordinate its actions with public and private institutions within the sphere of its responsibility;

Others established on the law and its regulation

Art. 49. INEN is the responsible entity for standardization in the country. This activity means the voluntary application that establishes solutions for repetitive or common applications, with the aim of reaching an optimum degree or order in a given context. Without harm to the voluntary nature of technical standards, authorities may require its observance in a technical regulation for specific purposes.

The process of building technical standards is kept under an open process where all stakeholders are connected. The preparation of technical standards follows the procedure indicated in the Technical Standardization Regulation (http://www.inen.gov.ec/site/images/pdf/normaliza/documentos/regl-norma-1r.pdf).

In summary, the process used is the following: the starting point is a project prepared by the INEN or presented to it by third parties, in the format established at the Technical Standard INEN 0. The Technical Sub-Committee is called on for the study, as well as public and private institutions from all sectors: productive, educational, administrative, consumers, ministries, municipalities, universities and industries. Once it is studied and approved it goes to the board of directors (included in the law), that reviews and approves or asks for correction. Once it is approved it goes to the official registration and after this publication the normative document cannot be modified or have its text increased. This could only be made through the review process established in the Technical Standardization Regulation.

COMPONENT 2: MANAGEMENT OF TELEHEALTH PROJECTS

Is there any national or state/department-level telehealth Project in the structured public setting?

A proposal has been made to develop the National Telemedicine/Telehealth Plan. The implementation will

be done in different stages according to the geographical areas. We have started with the Amazon Region.

Ecuador has the National Telemedicine/Telehealth Policy, Model and Plan, published in March 2010, access link: http://dspace.cedia.org.ec/bitstream/123456789/68/1/Telemedicina_MSP.pdf.

- Are there any municipal or university level initiatives related to telehealth that would enable the country to experiment telehealth projects? Are these initiatives public, private or mixed?

Yes there are some initiatives, especially from private universities with Schools of Medicine. Similarly, there are NGOs with very limited applications.

In addition, a working group in telehealth is being prepared at CEDIA. This group is made up of member Universities, and they are still working on several projects at national level. There are several private and mixed projects which had been carried out at universities.

- Is there any regulation related to the professional exercise of telehealth at professional boards in the healthcare area?

There isn't any national regulation. Some work is being done within the Telemedicine National Plan on "Telemedicine/Telehealth Policy and Model".

- Is there any remuneration policy for procedures or actions related to telehealth?

Not as a national policy, there is possibly something about this at the universities.

- Are there any national, state or local assessment projects of the implemented experiences?

There isn't any assessment project.

COMPONENT 3: STRATEGIES FOR THE USE OF TELEHEALTH IN THE PROMOTION, PREVENTION AND OFFER OF HEALTHCARE SERVICES

- Assess the initiatives of your country, regarding healthcare services offer through telehealth resources as being: non existent, planned, executed, installed and advanced. Comments.

There are some private initiatives, their success and/or experiences are not well disseminated. In many of them connectivity is the main limiting factor; however, the development of these services in an adequate and organized way it is still at an early stage.

National Telemedicine Plan aims to integrate all those initiatives and to create a common reference framework through a joint work with alignments and standards that cover and guide all public and private institutions involved.

- Assess the initiatives in your country, health prevention and/or promotion through telehealth resources as being: non existent, planned, executed, installed and advanced. Comments.

They do not exist at the government level. The National Telemedicine/Telehealth Network is at the implementation stage.

- With regard to the number of initiatives already described and having into account the level of telehealth development in the country, please describe the key success factors and the difficulties found.

Key success factors: Inclusion in State Policies as a key tool for achieving universality, equity, accessibility, quality and efficiency in healthcare services. Exclusive allocation of yearly budget, sufficient number of support staff. Human Resource Manager and technically trained technician.

Difficulties: Political Moment. Bureaucratic complications.

COMPONENT 4: STRATEGY FOR A RESEARCH NETWORK ON TELEHEALTH

- Are there any health institution carrying out videoconferencing sessions (IP, H323)? If yes, which? Classify the initiatives on this as: non existent, planning, put into operation, advanced or not applicable.

Yes, in some hospitals and private universities.

At the Ministry of Public Health: Situational Rooms and Control and Improvement Process of Public Health, through which a communication and coordination channel is established between the central and the provincial levels.

- Are there any health institutions that carry out webconference sessions? If yes, please state which ones. Classify the initiatives on this regard as: non existent, planning, put into operation and advanced or not applicable.

There are some isolated projects using webconferences via IP.

- Which health related topics are being treated today in virtual sessions by Health Researching Groups? Will topics like surgery, for example, be adequate for virtual sessions? Classify the initiatives on this regard as: non existent, planning, implementation, put into operation, advanced or not applicable.

CEDIA, together with the Ministry of Health is considering the use of pilot projects and prototypes that had been developed at the University of Cuenca for implementation. There are prototypes that had been tested in operating theatres.

- Is there a National Project, such as the University Telemedicine Network in Brazil, integrating University and Teaching Hospitals, universities and health research and educational institutions? How do they practice their integration? If there is any, please state which. Classify the initiatives on this regard as: non existent, planning, implementation, put into operation, and advanced or not applicable.

National Telemedicine/Telehealth Plan run by the Ministry of Public Health through PCYT is carried out with the determined participation and cooperation of several public and private institutions, enabling proposals through Interinstitutional Agreements between the Ministry of Public Health, MINTEL, SENPLADES, SENATEL, the Army and Universities. The National Plan is being implemented and its execution is organized in different stages. Thus, Stages 1 and 2 will cover Ecuador's Amazon until 2011 and the rest of the country during Stage 3 until 2013.

COMPONENT 5: TRAINING AND CERTIFICATION COURSE OF TRAINING MATERIAL

- Are there any telehealth modules in undergraduate or graduate health related degrees at the main universities in your country? Which?

Yes, at some private universities: Technical Private University of Loja (UTPL), Equinoccial Technological University (UTE) and others. Face to face classes are implemented in some undergraduate and graduate degrees.

The integration of the School of Medicine at the Central University into CICUT (Ibero-American Cluster for University Collaboration in Telemedicine) is a project driven by the UOC aiming to promote and develop Academic and Technological Cooperation, Research and Innovation Programs on Telemedicine.

- On the context of healthcare services, are there structured training courses on telehealth? Which ones are them and which institutions produce them?

There aren't any yet.

- Are there content certification processes related to health topics disseminated through the structure of government telehealth projects? How is it done?

None.

- Is there any teaching institution working with 3D organic modeling, animations in courses for healthcare professionals?

Unknown.