

# Regional Protocols to Public Policy on Telehealth Project

Francisco Evangelista Vieira

Senior Specialist – Division of Science and Technology – Inter American Development Bank – Washington – United States of America.

## Abstract

*The Project Public Policy Regional Guides for Telehealth in Latin America, funded by the Inter-American Development Bank, is starting its activities with the coordination of the Medical School of the Federal University of Minas Gerais and RNP/RUTE. The main goal is to generate a set of harmonized and agreed upon regional guides of public policies on telehealth goods and services (Regional Public Good). It has the following components: regional standard for minimum requirements for sending data and infrastructure; strategy for promoting, preventing and offering services through telehealth; regional guidelines for telehealth management; strategy for establishing a research network on telehealth topics and a telehealth training and certification model. The project has the participation of the following countries: Brazil, Colombia, Ecuador, Mexico, Uruguay and El Salvador.*

**Key words:** *Public Policy; Telehealth; Network Research.*

## Resumen

### Proyecto de Protocolos Regionales de la Política Pública de Telesalud

*El proyecto Protocolos regionales de políticas públicas para telesalud en América Latina, financiado por el Banco Interamericano de Desarrollo, está empezando sus actividades, bajo la coordinación de la facultad de medicina de la UFMG y la RNP/RUTE. El objetivo principal es generar un conjunto de protocolos regionales de políticas públicas, armonizados y acordados, sobre bienes y servicios de telesalud (Bien Público Regional). Tiene los siguientes componentes: estándar regional de requisitos mínimos para la transmisión de datos e infraestructura; estrategia para la promoción, prevención y oferta de servicios a través de telesalud; directrices regionales para la gestión de telesalud; estrategia para la creación de una red de investigación en temas de telesalud y modelo de capacitación y certificación en telesalud. Participan los siguientes países: Brasil, Colombia, Ecuador, México, Uruguay y El Salvador.*

**Palabras clave:** *Políticas Públicas; Telesalud; Red de Investigación.*

## Resumo

### Projeto Protocolos Regionais para Política Pública em Telessaúde

*O projeto Protocolos regionais de políticas públicas para telessaúde na América Latina, financiado pelo Banco Interamericano de desenvolvimento, está iniciando suas atividades, sendo coordenado pela Faculdade de Medicina da UFMG e a RNP/RUTE. O objetivo principal é gerar um conjunto de protocolos regionais de políticas públicas, harmonizados e acordados, sobre bens e serviços de telessaúde (Bem Público Regional). O projeto possui os seguintes componentes: padrões regionais de requisitos mínimos para a transmissão de dados e infra-estrutura; estratégia para a promoção, prevenção e oferta de serviços através de telessaúde; diretrizes regionais para a gestão de telessaúde, estratégia para a criação de uma rede de investigação em temas de telessaúde e modelo de capacitação e certificação em telessaúde. Participam os seguintes países: Brasil, Colômbia, Equador, México, Uruguai e El Salvador.*

**Palavras-chave:** *Políticas Públicas; Telessaúde; Rede de Investigação.*

The structuring process of telehealth actions is on its way in Latin America with some initiatives being established as an important international reference in the area. However, there is a significant unbalance in the way the different countries of the area incorporate these resources. If on the one hand, countries like Brazil and Mexico are highly developed in the area and are already using the results of national structured projects, on the other hand most countries do not yet experience a wide process for incorporating telehealth resources.

Telehealth is a field of knowledge that has complexity for its structuring process because it adds different skills: technological development including setting up networks and software development from the most simple one to the most advanced, an interaction between the areas of arts, communication and health regarding the use of 3D modeling, in addition to the impact on teaching and health systems organization with reformulations of assistance work processes and professional training.

This set of features with innovative and quite structuring elements of the area enables shared processes favoring great advances regarding the specific development of the area.

Another aspect which is quite significant for the development process of telehealth in Latin America sends us back to the origin itself of telemedicine/telehealth – its preliminary development goes back to the needs for assistance parameters distance monitoring in projects formulated by NASA. The Amazon region, a huge area with low demographic density and that can only be acceded by river - which requires a long time to get around- constitutes a challenge and a favorable field for incorporating telehealth resources, with very clear benefits for its population to have access to more complex health services in a timely manner. It is already possible to have a set of assistance procedures – from the access to medical consultations of specialists, using all the technological tools available by the telehealth area that has been gradually digitalizing all the therapeutic arsenal and therapies, allowing remote located professionals to have access to quality sounds and images with an unquestionable diagnostic nature. Many research projects had already experimented specific implementation processes in the Amazon region with very promising results.

A contribution of telehealth to structuring national health systems can be significant. There is an on going reformulation process of the structural bases of health systems. Many studies confirm that health system structures that are strongly based on primary healthcare lead

to less healthcare expenses, having a significant impact on morbimortality indicators in different social realities. This context, together with the increasing expenses on the healthcare area above the GDP and population growth, has driven a convergence towards primary healthcare agenda with two directions.

On the one hand, the World Health Organization (WHO) states the values of Alma-Ata, highlighting that health for all requires healthcare systems that are able to meet the challenges of a changing world and the increasing expectations of better results, implying substantial re-orientation and reform of the current operation of today health systems in the society: these reforms constitute the agenda for renewing Primary Healthcare.<sup>1</sup>

On the other hand, during the last decades, there are models incorporating the primary healthcare agenda in more limited functional dimensions, focused on cost rationalization: a) Selective packages focused on service offer, organized according to the primary healthcare principles and b) Managed care that assumes first contact services before the patient is referred to specialists or to more complex procedures, with wide use of information technologies for controlling the costs of the system. These influences gained significant relevance over the nineties, and they influenced the structuring of health systems greatly. Later, especially in Europe, new initiatives were implemented with the aim of re-structuring primary healthcare. These changes favor improvements aiming at the quality and efficiency of primary care.

In Latin America primary healthcare implementation is already having a deep dynamic impact in structuring health systems because it generates new ways of resource allocation, work market formation, in the ways of organizing services, in the pressure of decentralization process and in the relationship with popular participation. The implementation of programs with emphasis on primary healthcare, as it has already been happening in some model experiences. Besides strengthening a regular reference and being the reference entry door, it has the potential of providing a coordination key of medium and high complexity, constituting the strategic sustainability for national systems.

In the general context of reformulation of national health systems facing the new challenges of an increasingly changing world with relevant impacts in healthcare, the process of incorporating telehealth resources has a very important role. It works on a more rational process of cost cutting, without the aim of sub-production of care or more accentuated control of the medical professional; on the

other hand, when introducing access and sharing of clinical decisions, it enables adding new intervention elements in care, more shared and with more chances of success and the unnecessary use of resources. On the other hand, it intervenes in the specific way of producing medical-health care with high impacting power on the assistance with the goal of strengthening relationships among people and primary healthcare.

In this complex context of reformulation of the ongoing assistance model with gradual accumulation in the public area, together with an increasing process of social incorporation of information technologies, there is a situation of new requirements and profiles for the training process of human resources in the health area and for the structure itself of health systems.

It is this scenario of growing health public systems in Latin America and of growing incorporation of information technologies in the society that the educational system will face during the next period, constituting situations of radical changes of health paradigms- focused on individual models, both curative and hospital-centered that guide traditional medical training over the last periods, organizers of traditional systems of care – together with the needed process of increasing incorporation of using information resources in the assistance process itself and in training processes, with the large scale use of telehealth, electronic health and distance learning. In the private health sector there is also an ongoing fast growing process of incorporating telehealth resources.

As a consequence, there are several isolated initiatives in Latin America.

The different countries of the continent had experienced shared development processes on the telehealth area. The beginning of these activities took place within the context of the European Community @lis project at the end of 2002, with the implementation of several demonstration projects on telehealth involving European and Latin American partners, such as: Colombia, Peru, Ecuador, Brazil and Mexico.

Later in 2005, the Eurosocial project – EUROsocial Consortium: the strengthening of healthcare at the community, for the most vulnerable and excluded sectors of the population. Theme line 1: Information and Communication technologies on health as a vehicle for social integration, with the participation of 9 countries, was guided by an articulated process of experience exchange also on the field of telehealth. Currently, the initiatives on the scope of the Economic Commission for Latin America (ECLAC), the Laboratory of Excellence and Innovation on Telehealth, Latin

American/Europe, the EHAL (E-Health Europe Latin America Link) 2009 project - make it possible the articulation of specific initiatives among the different countries in Latin America having as a goal the development of this area.

It is in this context of specific and fragmented initiatives that the discussion for a more structured process including several components of the telehealth area appears– the Public Policy Regional Guides for Telehealth project, financed by the Inter-American Development Bank and with the following components: 1) Regional standard of minimum requirements for sending data and transmission infrastructure; 2) Strategy for promoting, preventing and offering services through telehealth; 3) Regional guidelines for telehealth management; 4) Strategy for establishing a research network on telehealth topics; 5) Telehealth Training and Certification Model. This project starts now with the participation of six Latin American countries - Brazil, Mexico, Colombia, El Salvador, Ecuador and Uruguay, and it is open to new countries. The agreement was signed on November 2009 and it is coordinated by the Federal University of Minas Gerais and by RNP/RUTE.

Below there are the details of the project that at the moment is on the initial stage of its activity development.

### Goal

The objective of the Program is to generate a set of harmonious and agreed upon public policy regional guides on telehealth goods and services (Regional Public Good). The main goal is to increase efficiency, to reduce transaction costs and to increase the quality of telehealth services provided in the region for population with difficult access to such services, including the indigenous communities.

### Description

The Program is structured in five components, which activities are described below

#### COMPONENT 1: REGIONAL STANDARD OF MINIMUM REQUIREMENTS FOR SENDING DATA AND TRANSMISSION INFRASTRUCTURE

The goal of this Component is to establish a regional standard for data sending among countries and institutions and minimum standards of technological and communication infrastructure that make its integration possible. The main products reached with these Components

will be the minimum standards for ratifying procedures and minimum integration requirements of telecommunication and network inter-connection, together with guidelines for preparing public policies that will state the details of regional principles and standards that will be followed by all the countries.

In order to generate the proposed products, countries will carry out diagnosis of the existing standards, considering the international telehealth standards prepared by the World Health Organization (WHO) and by organizations responsible for standardization such as (ISO, ABNT in Brazil and others), that may be adapted to the needs and circumstances of the countries, to the systematized experiences (good international and national practices), to the technical and legal capabilities and to the differences regarding the regional point of view.

This Component will finance a database of national and international standards for supporting telehealth activities in all the countries, as well as hiring specialized consultancies to design and harmonize the products. Once the regional standards are defined, dissemination activities will take place targeting strategic agents on the training required.

The Bank will finance the costs of the consultancy for the diagnosis of good practices inside and outside the region, of the guidelines and the databank and the costs of specialized consultancy for formulating the agreement. It will also fund seminars, dissemination activities and targeted training.

#### COMPONENT 2: STRATEGY FOR PROMOTING, PREVENTING AND PROVIDING SERVICES THROUGH TELEHEALTH

The goal of this Component is to create a strategy that enables the promotion, prevention and provision of telehealth services. This strategy will consider procedures and standards to offer telehealth services that will be implemented in each country, particularly the services provided for excluded populations, such as the indigenous communities and those people with difficult access to healthcare. The strategy will include a set of guides that will establish the rules relevant to the minimum normative standards, regarding legal and ethic issues for telehealth (for example, in fields such as the electronic medical record and electronic medical prescriptions); a glossary and regional common nomenclature; a payment service per service provided; a guide for consultations and electronic exams and for the second opinion; how to deal with the privacy of patients; and conflict solving, among other topics.

In order to generate the products proposed, countries will carry out the diagnosis of the existing standards and practices in each one of them and they will review successful practices and experiences in other countries, inside and outside the region. Specialized consultants will be hired to design and formulate the agreement on the products. This agreement will require seminars and planning meetings. Once the strategy is defined, dissemination activities will take place targeting strategic agents on the training required.

The Bank will finance the costs of the consultants to determine the successful practices and the reproducible experiences, as well as a specialized consultancy to formulate the agreement and seminars, dissemination activities and consultations.

#### COMPONENT 3: REGIONAL GUIDELINES FOR TELEHEALTH MANAGEMENT

The goal of this Component is to develop regional guidelines for telehealth management, bearing in mind the efficient planning of telehealth at regional and national level. Such guidelines will consider a management guide that will enable university and teaching hospitals connection, the management of healthcare facilities, healthcare services provided for excluded populations (such as indigenous and communities with difficult access to healthcare) and to follow good practices on managing healthcare assistance through telehealth and on the technological management of telehealth.

In order to generate the products proposed, the countries will carry out the diagnosis of the existing standards and practices in each one of them and they will review successful practices and experiences in other countries, inside and outside the region. In addition, specialized consultants will be hired to design the products and to formulate the agreement. This agreement will require seminars and planning meetings, as well as targeted dissemination activities.

The Bank will finance the costs of the consultants for identifying the successful practices and the reproducible experiences, and a specialized consultancy to reach the agreement. The Bank will also pay for seminars, dissemination activities and consultations.

#### COMPONENT 4: STRATEGY FOR ESTABLISHING A RESEARCH NETWORK ON TELEHEALTH TOPICS

The goal of this Component is to establish the strategy and the guidelines for a researching network on telehealth



that will be both an inter-university network and/or an excellence and innovation lab on the topic, with the participation of several researching groups.

In order to generate the products proposed, the countries must prepare a strategy that considers the minimum requirements for taking part in the network, in order to share information and to plan research regionally on topics related to technological standards applied to telehealth. The strategy should promote the enhancement of the management methods of healthcare services, in order to reduce the costs of extending access to such services and to improve its quality. In addition specialized consultants will be hired to design and formulate the agreement on the products. This agreement will require seminars and planning meetings. Small pilot programs can be done for testing and feedback, besides targeted dissemination activities.

The Bank will finance the costs of some raw material for preparing the strategy and the specialized consultancy to formulate the agreement together with seminars, pilot programs, dissemination activities and targeted training.

#### COMPONENT 5: TELEHEALTH TRAINING AND CERTIFICATION MODEL

The goal of this Component is to generate a training and certification model of medical staff and technological management personnel accepted across the countries, that will also allows patients to acquire knowledge on telehealth services.

In order to generate the product proposed, countries will identify the models already used in their territories, considering successful models or practices from other countries, outside or inside the region. Specialized consultants will also be hired to design the products and to formulate the agreement on them and to review the good practices at an international level. This agreement will require seminars and planning meetings. Small pilot programs can also be done for testing and feedback of the model.

The Bank will finance the consultants who will develop the training and certification model and it will also pay the specialized consultancy for formulating the agreement as well as the expenses for seminars, pilot programs, dissemination activities and targeted training sessions.

#### REFERENCES

1. World Health Organization. Primary Health Care. Now more than ever. Geneva: WHO; 2008. The World Health Report 2008.