PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION

51st DIRECTING COUNCIL
63rd SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 26-30 September 2011

Provisional Agenda Item 4.10

CD51/13 (Eng.)
1 August 2011
ORIGINAL: SPANISH

STRATEGY AND PLAN OF ACTION ON *eHEALTH*

Introduction

1.   In Latin America and the Caribbean considerable inequalities persist in access to health services, owing to a series of factors that limit the possibilities of receiving timely quality medical care. These factors include insufficient human and infrastructure resources, lack of equipment and drugs, the physical and cultural distance between the services and the population that needs them, and low incomes. Hence, income level, geographical location, and ethnic origin are the determinants of the vulnerability and exclusion of millions of households in the Region (*1*).

2.   The objective of the *eHealth* Strategy and Plan of Action (2012-2017) is to help ensure the sustainable development of the Member States' health systems, including veterinary public health. Adoption of the *eHealth* Strategy and Plan of Action is envisaged as a means of improving health services access and quality, based on the use of information and communications technologies (ICTs), the development of digital literacy and ICTs, access to information based on scientific evidence and ongoing training, and the use of various methods. This will facilitate progress toward the goal of societies that are more informed, equitable, competitive, and democratic. In such societies access to health information is considered a basic right of the people.

3.   This strategy is based on Resolution WHA58.28 (2005) of the World Health Organization (WHO), adopted at the Fifty-Eighth World Health Assembly, which established the linchpins of the WHO *eHealth* Strategy (*2*).

4.   According to WHO (*2*), telemedicine or *eHealth* is defined as "the cost-effective and secure use of information and communications technologies in support of health and

health-related fields, including health-care services, health surveillance, health literature, and health education, knowledge and research."

5.   Some components of *eHealth* are (*3*):

(a)   Electronic medical records (or electronic health record): a real-time longitudinal electronic record of an individual patient's health information that can assist health professionals with decision-making and treatment.

(b)   *teleHealth (*including *telemedicine)*: this involves the delivery of health services using ICTs, specifically *where* distance is a barrier to health care.

(c)   *mHealth (or health through the use of mobile devices)*: a term for medical and public health practice *supported* by mobile devices, such as mobile phones, patient monitoring devices, and other wireless devices.

(d)   *eLearning (including distance education or learning)*: the use of ICTs for learning. It can be used to *improve* the quality of education, to increase access to education, and to make new and innovative forms of education available to more people.

(e)   *Continuing education in information and communication technologies*: the provision of courses or programs (not necessarily formally accredited) for health professionals that helps them to develop information and communication technology skills for *application* in health. This includes current methods for sharing scientific knowledge, such as e-publication, open access, digital literacy, and the use of social networks.

(f)   *Standardization and interoperability*: the term "interoperability" refers to communication between different technologies and software applications for the efficient, accurate, and sound sharing and use of data. This requires the use of standards−that is, rules, regulations, guidelines, or definitions with technical specification to make the integrated management of health systems viable at all levels.

Background

6.   Addressing the use and application of information and communications technologies (ICTs) in the field of public health offers the promise of innovation, as well as sociosanitary and economic benefits to any country that pursues them (*4, 5*):

(a)   From the standpoint of *innovation, eHealth* makes it possible to change work processes and improve communications, interaction, risk management, and

patient safety, thereby ensuring evidence-based decision-making and generally enhancing the safety of patients.

(b)   From the *socio-sanitary* standpoint, applying technology to health care processes (e.g., medical care and waiting lists) can improve the quality of life of patients and the general population. Health care services will therefore become more personalized, integrated, and seamless. Moreover, these new services can help to overcome geographical and time barriers in terms of waiting times and access to health professionals.

(c)   From the *economic* standpoint, the benefits of using technology in the field of health can heighten efficiency in time and resource use, improve input for complex decision-making, and set priorities on the basis of scientific evidence.

7.   By 1998, the World Health Organization, in the document entitled "*Health-for-all policy for the twenty-first century*" (*6*), was already advocating the appropriate use of health technology within the general health-for-all policy and strategy.

8.   Also in 1998, Resolution WHA51.9 *(7)* established the lines of action regarding the cross-border advertising, promotion, and sale of medical products through the Internet.

9.   During the 2003 World Summit on the Information Society (*8*), *eHealth*, or the application of ICTs to the field of health care, was considered a discipline that could prove useful in terms of improving the quality of life of the population.

10.   In 2004, WHO report EB115/39 on *eHealth* (*9*) and Resolution EB115.R20 (*10*) addressed the need of the Member States to formulate *eHealth* strategies reflecting principles of transparency, ethics, and equity, and also encouraged them to develop the necessary infrastructure to that end, and to promote multisectoral participation via public-private partnerships.

11.   In 2005, at the Fifty-Eighth World Health Assembly, WHO, adopted resolution WHA58.28, establishing the main lines of its *eHealth* strategy.

12.   Three ministerial conferences on the information society were held by the Economic Commission for Latin America and the Caribbean (ECLAC) in 2005, 2008, and 2010. At each of them, regional plans of action have been signed that include the area of health (*1*).

Current situation analysis

13.   In the Region of the Americas, the three main challenges in the health sector are (*1*):

(a)   Limited access to health services by broad segments of the population, owing to economic, cultural, geographical, and ethnic differences.

(b)   Overlapping epidemiologic profiles that make it necessary to adopt a number of different health strategies simultaneously to cope with the burden of communicable and noncommunicable diseases (the latter of which have increased due to the aging of the population).

(c)   Insufficient infrastructure, as well as human and budgetary resources.

14.   Access to information and communications technologies (ICTs) is not universal. Accordingly, many countries and populations in the Region have unequal access to ICTs. A 2010 study by the International Telecommunication Union (ITU) (*11*) found that, in the Region of the Americas, the average percentage of fixed telephone lines per 100 inhabitants was 17.15%, and 83.27% for mobile lines. With regard to households with a personal computer, the average was 24.20%; the figure for households with Internet access was 13.30%; whereas the average of Internet users per 100 inhabitants was 25.2%.

15.   The use of ICTs in the health sector continues to grow and is driving significant changes in the way the population interacts with health services aimed at diminishing the aforementioned challenges. The PAHO *eHealth* Program (*12*) has identified some practical applications for the use of these technologies in health systems and services, as well as their advantages for health workers, patients, and citizens in general (e.g., individual health cards, perinatal information system, digital EMRs, electronic prescription of medicines, and telemedicine).

16.   Information technology management (ITM) also plays a key role in expanding health services coverage to remote areas, where the introduction of mobile technology has proven critical in addressing the health needs of rural populations during health emergencies and disasters.

17.   In 2006, WHO published the results of a survey examining the utility of *eHealth* tools (*13*) that included responses from nine countries in the Region of the Americas.[1] In all cases, the responding countries indicated that such tools were either useful or very useful.

---

[1] The following countries participated in the survey: Belize, Chile, Dominican Republic, El Salvador, Honduras, Mexico, Paraguay, Peru, and Suriname.

18.   In 2009, the Economic Commission for Latin America and the Caribbean (ECLAC) conducted a study of the Region's health ministries and health services (*14*), which found that all of them maintained institutional data. In fact, 65% of the countries provide data on health promotion and disease prevention, and are also able to indicate the location of health services in 41% of the Member States surveyed.

19.   In 2010 (*15*), PAHO conducted a study to determine the existence of information technology and health communication policies, strategies, and legislation in the Americas. This research, based on the responses of 19 Member States,[2] revealed that some 68% of the responding countries considered *eHealth* a priority on their national agendas, while 47% indicated having policies or strategies for the use of ICTs within the health sector.

20.   In this same vein, WHO's second global *eHealth* survey (*3*), published in 2010, provides information of interest on 11 Member States of the Americas that responded to the survey:

(a)   With regard to the political framework, 82% of the countries surveyed indicated having an eGovernment policy; 45% an *eHealth* strategy; and 36% a specific telemedicine policy.

(b)   With regard to the legal framework, 82% reported having legislation in place to ensure the confidentiality of personal data, while 54% indicated having regulations that specifically protect the patient's identity in electronic medical records.

(c)   With regard to expenditure, 82% of the Member States that participated in this survey stated that they were investing in technology and software; moreover, 73% of the countries invest in pilot projects in *eHealth* and 63% in digital literacy and the use of these technologies.

(d)   With regard to the use of mobile devices for managing data on public health practices (also known as mobile health), 91% of the countries surveyed reported having undertaken such initiatives, whereas only 18% acknowledged having conducted a formal evaluation of these activities.

(e)   With regard to using ICTs for distance learning (or eLearning) initiatives, 82% of the Member States participating in the survey reported using this teaching tool for the health sciences, while 91% acknowledged using distance learning to train health professionals.

---

[2] The Member States participating in the study were: Argentina, Belize, Brazil, Bolivia, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, and Uruguay.

21.   The Region is making continuous efforts to construct the Virtual Health Library (VHL), a scientific network and network of websites on technical information in health that uses information and communication technologies. However, the VHL must be consolidated as a venue for integrating information sources and achieving greater interoperability with the available applications and online health services, such as mobile devices. Political support is needed to carry these integration efforts forward and promote their development and sustainability. Progress in evidence-based health care demands the efficient production, organization, management, collection, and dissemination of scientific and technical knowledge through information and communication technologies.

22.   Studies conducted since 2006 reaffirm the need to formulate an *eHealth* Strategy and Plan of Action for the Region of the Americas as a means of coordinating activities and supporting beneficial initiatives through an *eHealth* agenda.

23.   With a view to establishing a forum to promote and discuss the objectives of and strategies for implementing ICTs for public health applications in the Region of the Americas, the Pan American Sanitary Bureau recommends:

•   Carrying out a technical consultation on *eHealth*.
•   Forming a Technical Advisory Group (TAG). This TAG will address the following areas: (a) infrastructure; (b) information systems; (c) tel*eHealth* and telemedicine; (d) the Internet and access to information; (e) policies; (f) training; (g) risk management and patient safety; (h) unique patient identification and electronic medical registry; (i) standards and interoperability; (j) legal matters; (k) electronic governance;[3] and (l) monitoring, analysis, and evaluation.
•   Establishing a regional *eHealth* laboratory to promote a venue for the research, promotion, and discussion of objectives and strategies on the application of information and communication technologies to public health.

24.   Given its cross-cutting nature with respect to the Strategic Objectives contained in the PAHO Strategic Plan 2008-2012 (*16*), this Strategy and Plan of Action is directly related to:

•   Strategic Objective 10 (to improve the organization, management, and delivery of health services).
•   Strategic Objective 11 (to strengthen leadership, governance and the evidence base of health systems).

---

[3] Taking the definition of the Organization of American States, "e-government" can be defined as the use of Information and Communication Technologies (ITC) by government institutions to qualitatively improve the services and information offered to citizens, increase the efficiency and efficacy of public administration, and substantively increase public sector transparency and citizen participation." Available at: http://www.oas.org/es/sap/dgpe/guia_egov.asp.

- Strategic Objective 12 (to ensure improved access, quality and use of medical products and technologies).

25.   By facilitating access to technology and information, *eHealth* has proven to be means for enhancing the quality of life of the population. Consequently, *eHealth* is essential for achieving the Millennium Development Goals (*17*), particularly Targets 4a ("Reduce by two thirds [between 1990 and 2015] the mortality rate among children under five"), 5a ("Reduce by three quarters the maternal mortality ratio") and 8f: ("In cooperation with the private sector, make available benefits of new technologies, especially information and communications").

26.   Mindful of the heterogeneity of the Region and the fact that its countries and populations have different needs and adopt different sociocultural methods for improving health, this Strategy and Plan of Action respects and adheres to the following principles and values set forth in the Health Agenda for the Americas (2008-2017) (*18*): (a) human rights; (b) universality; (c) access and inclusion; (d) Pan American solidarity; (e) equity in health; and (f) social participation.

Proposal

27.   The *eHealth* Strategy and Plan of Action (2012-2017), is based on:

- strengthening of health systems;
- integration, decentralization, and the elimination of obstacles hindering access to services;
- optimal management of infrastructure and human resources;
- promotion of community participation mobilization and strengthening of support networks;
- mobilization and strengthening of support networks;
- establishment of intersectoral and public-private partnerships;
- strengthening of national science and technology output;
- taking advantage of the regional experience of veterinary public health programs.

28.   In order to meet the targets of the proposed *eHealth* Strategy and Plan of Action, proposal, it will be necessary to:

- promote and facilitate horizontal cooperation among the countries of the Region;
- share experiences, regional resources, and lessons learned;
- identify the pertinent legal aspects;
- determine the interoperability of technology systems and adherence to published standards;
- formulate technical and methodological standards for sharing anonymous data and information and knowledge;

- promote the exchange, access, and use of evidence-based information through the virtual health libraries (VHL);
- promote interinstitutional collaboration at both the structural and management levels.

29.   The objective of this proposal is to help PAHO Member States continually improve public health in the Region of the Americas through innovative ICT tools and methodologies.

Strategy and Plan of Action[4]

30.   The Strategy and Plan of Action includes the following strategic actions and specific objectives:[5]

Strategic Area 1: Endorse and promote the formulation, execution, and evaluation of effective, comprehensive, and sustainable public policies on the use and implementation of information and communication technologies in the health sector.

Objective 1.1: Support the formulation and adoption of people-centered *eHealth* public policies.

Indicator

1.1.1   Number of Member States that have a policy in place to support the use of information and communication technologies in the health sector. (Baseline: 12. Source: WHO and ECLAC. Target: 31 by 2016.)

Objective 1.2: Help set *eHealth*-related political priorities at the national and regional levels.

Indicators

1.2.1   PAHO will have an *eHealth* technical advisory committee in place. (Baseline: 0. Target: 1 by 2012.)
1.2.2   PAHO and its Member States will have set *eHealth* policy priorities at the local, national, and regional levels. (Baseline: No. Target: Yes, by 2014.)

---

[4] A review will be conducted at the end of the first year of plan execution to complete the information, and at the same time, this plan will be aligned with the Strategic Objectives and Indicators of the Organization's Strategic Plan 2013-2017.
[5] The technical area in charge of this proposal has a detailed plan that includes the activities for the plan.

Objective 1.3: Support the establishment of an intersectoral national network (civil society/public network/private network) to participate in the formulation of *eHealth* policies and standards, as well as decision-making in that area.

Indicator

1.3.1 Number of Member States that have created institutional mechanisms for forming national partnerships among civil society, government, and private sector entities to promote *eHealth*. (Baseline: 4. Source: WHO. Target: 29 by 2015.)

Objective 1.4: Consolidate a regional system to evaluate and analyze the *eHealth* policies of the Member States.

Indicator

1.4.1 By 2012, a regional laboratory will be operating in the countries of the Hemisphere with the objective of analyzing and implementing *eHealth* policies, using methods and tools that support their implementation. (Baseline: 0. Target: 1 by 2012.)

Strategic Area 2: Improve public health through the use of tools and methodologies based on innovative information and communication technologies.

Objective 2.1: Improve organizational and technology infrastructure.

Indicators

2.1.1 Number of Member States that have funded at least five activities (research and/or projects) on the application of ICTs in the field of health at both the local and national levels. (Baseline: 8. Source: WHO. Target: 26 by 2014.)
2.1.2 PAHO and the Member States will have established a strategy for identifying and strengthening the basic organizational and technology infrastructure (telephones, Internet, and e-mail) in the health services. (Baseline: 0. Target: 1 by 2014.)

Objective 2.2: Promote the use of epidemiologic surveillance services, including the human-animal interface, through the use of information and communication technologies.

Indicators

2.2.1 Number of Member States that use epidemiological surveillance services through information and communication technologies. (Baseline: 10. Source: WHO. Target: 26 by 2015.)

2.2.2   Number of Member States that have made mobile technology part of their epidemiologic surveillance systems. (Baseline: 10. Source: WHO. Target: 26 by 2015.)

Objective 2.3: Promote the sustainable, interoperable development of *eHealth*-centered programs and initiatives that are capable of expansion.

Indicators

2.3.1   PAHO and the Member States will have adopted a common framework for unique patient identification. (Baseline: 0. Target 1 by 2016.)
2.3.2   Number of Member States that provide online services (e.g., individualized citizen identification, digital clinical records, electronic prescription of medicines) and telemedicine at the different levels of care through health facilities. (Baseline: 13. Source: WHO and ECLAC. Target: 22 by 2016.)

Strategic Area 3: Promote and facilitate horizontal cooperation among countries for development of a digital health agenda for the Region.

Objective 3.1: Promote intersectoral cooperation, both within each country and among several countries, and identify electronic mechanisms for sharing best practices, regional resources, and lessons learned.

Indicators

3.1.1   PAHO, in collaboration with the Member States participating in the regional *eHealth* laboratory, will disseminate biennial reports evaluating the policies of the Member States (Baseline: No. Target: Yes by 2014.)
3.1.2   PAHO and the Member States will have adopted a strategy for communicating and disseminating information to stakeholders and the general public. (Baseline: 0. Target: 1 by 2014.)

Objective 3.2: Promote the standardized interoperability of health systems (organizational and technological interoperability).

Indicators

3.2.1   Number of Member States that have a standard protocol for information-sharing on their health information system. (Baseline: 0. Target: 17 by 2017.)
3.2.2   PAHO and the Member States will have defined a common framework for the development of a compatible standard for information exchange among systems. (Baseline: 0. Target: 1 by 2015.)
3.2.3   Number of Member States that have a methodology for determining the arrangements and procedures to be used by the different organizational and

administrative units that interact in the technology-mediated delivery of medical/public health services. (Baseline: 0. Target: 17 by 2017.)

Objective 3.3: Identify a legal framework that supports the use of information and communication technologies in the health sector and facilitates the electronic sharing of clinical information at the national and regional level. This legal framework will promote the validity of telemedicine activities and safeguard the protection of personal data.

Indicators

3.3.1   Number of Member States that have a legal framework to promote the security of information systems and protect personal data and confidentiality in computerized information systems. (Baseline: 6. Source: WHO. Target: 25 by 2017.)

3.3.2   Number of Member States that have a legal framework that facilitates the electronic sharing of clinical information at the national level (Baseline: 4. Source: WHO. Target: 17 by 2017.)

3.3.3   PAHO and the Member states will develop a legal framework that promotes the electronic sharing of clinical information at the regional level. (Baseline: 0. Target: 1 by 2017.)

Strategic Area 4: Knowledge management, digital literacy, and education in information and communication technologies as key elements for ensuring the quality of care, health promotion, and disease prevention activities, guaranteeing training and better access to information in an equitable manner.

Objective 4.1: Promote training in information and communication technologies in universities and among health professionals.

Indicator

4.1.1.   Number of Member States that have a training plan for universities in the area of information and communication technologies and health. (Baseline: 9. Source: WHO. Target: 28 by 2015.)

Objective 4.2: Provide reliable, quality information on health education and disease prevention to the population and health professionals.

Indicators

4.2.1   Number of Member States that have a policy governing open access to certified public health content. (Baseline: 0. Target: 10 by 2017.)

4.2.2   Number of Member States with a national virtual health library with information sources and services that address the topics of education for health, disease

prevention, and the health priorities identified in their national health plans and strategies and that are clearly and systematically available in the VHL (Baseline: 0. Target: 11 by 2013.)

4.2.3　PAHO and the Member States will have defined a common framework for the development of Web portals containing certified public health content. (Baseline: 0. Target: 1 by 2014.)

4.2.4　Number of Member States with access and local capacity to produce and use the content of the Virtual Health Library. (Baseline:26. Target: 35 by 2015.)

Objective 4.3: Facilitate the dissemination, communication, and widespread distribution of health information, with emphasis on emergencies, through social networks.[6]

Indicators

4.3.1　Number of Member States that have a strategy for using social networks in emergencies. (Baseline: 0. Target: 15 by 2017.)

4.3.2　Number of Member States that have a strategy to support the use and presence of social networks as a medium for health promotion and disease prevention activities. (Baseline: 12. Source: ECLAC. Target: 29 by 2016.)

Monitoring, analysis, and evaluation

31.　This plan of action contributes to the achievement of Strategic Objectives 10[7], 11[8] and 12[9] of the PAHO Strategic Plan. The region-wide expected results to which this Plan contributes are detailed in Annex C. The monitoring and evaluation of this Plan are in alignment with the Organization's results-based management framework, as well as its performance monitoring and evaluation processes. In this regard, progress reports will be issued based on the information available at the end of each biennium.

32.　During the last year of the Plan, an evaluation will be conducted for the purpose of identifying the strengths and weaknesses in its overall execution, as well as the causative factors in its successes and failures, along with future actions.

---

[6]　The technical area in responsible for this proposal has a strategy proposal on the use of social networks in public health. The proposal is available at:
http://new.paho.org/blogs/kmc/wp content/uploads/2011/02/RedesSocialesOPS_v230211.pdf

[7]　SO 10: To improve the organization, management, and delivery of health services,

[8]　SO 11: To strengthen leadership, governance, and the evidence base of health systems.

[9]　SO 12: To ensure improved access, quality, and use of medical products and technologies.

Action by the Directing Council

33.   The Directing Council is invited to review the information contained in this document and examine the possibility of approving the draft resolution presented in Annex A.

References

1.   Economic Commission for Latin America and the Caribbean (ECLAC). Third Ministerial Conference on the Information Society in Latin America and the Caribbean. Lima, Peru. Santiago, Chile; ECLAC; 2010.

2.   World Health Organization. *eHealth* [online]. 58th World Health Assembly; 16-25 May 2005; Geneva, Switzerland: WHO; 2005 (resolution WHA58.28) [accessed 2010 March 12]. Available at: http://apps.who.int/gb/ebwha/pdf_files/WHA58/WHA58_28-en.pdf.

3.   World Health Organization. *Atlas eHealth Country Profiles: Based on the findings of the second global survey on eHealth*. (Global Observatory for *eHealth* Series, 1). Geneva: World Health Organization; 2010.

4.   D'Agostino M., Novillo-Ortiz D. PAHO/WHO: *eHealth* conceptual model and work programme for Latin America and the Caribbean. In: The Global People-centred *eHealth* Innovation Forum. London: BMJ Group; 2011:10-12.

5.   Pan American Health Organization. *eHealth* [online]. Washington, D.C.: PAHO; 2007-2011. Bibliography [accessed 2011 March 2]. Available at: http://new.paho.org/ict4health/index.php?option=com_content&view=article&id=29&Itemid=40&lang=en.

6.   World Health Organization. Health-for-all policy in the twenty-first century [online]. 101st Session of the Executive Board. 16 December 1997; Geneva, Switzerland: WHO; 1997 (document EB101/9) [accessed 2011 March 12]. Available at: http://apps.who.int/gb/archive/pdf_files/EB101/pdfangl/ang9.pdf.

7.   World Health Organization. Cross-border advertising, promotion, and sale of medical products through the Internet [online]. 101st Executive Board. 23 January 1998; Geneva, Switzerland: WHO; 1998 (Resolution EB101.R3) [cited 2011 March 12]. Available at: http:/apps.who.int/gb/archive/pdf_files/EB101/pdfangl/angr3.pdf.

8.   International Telecommunication Union. World Summit on the Information Society. Geneva, Switzerland: International Telecommunication Union; 2003.

9.   World Health Organization. *EHealth* [online]. 115th Session of the Executive Board. 16 December the 2004; Geneva, Switzerland: WHO; 2004 (document EB115/139) [accessed 2011 March 12]. Available at:
        http:/apps.who.int/gb/ebwha/pdf_files/EB115/B115_39-en.pdf.

10.   World Health Organization. *EHealth* [online]. 115th meeting of the Executive Board. 24 January 2005; Geneva (Switzerland). Geneva (Switzerland): WHO; 2005 (resolution EB115.R20) [accessed 2011 March 12]. Available at:
        http:/apps.who.int/gb/ebwha/pdf_files/EB115/B115_R20-en.pdf.

11.   International Telecommunication Union [online]. Geneva: International Telecommunication Union; c2011 [accessed 2011 March 11]. Information and Communication Technology (ICT) Statistics. Available at:
        http://www.itu.int/ITU-D/ict/.

12.   Pan American Health Organization. PAHO *eHealth* Program: ICT Tools and Methodologies to Improve Public health in the Americas Region [online]. Washington, D.C.: C2007-2011 PAHO [accessed 2011 March 2]. Available at:
        http:/new.paho.org/ict4health/images/stories/ict4health/*eHealth*-program-eng.pdf.

13.   World Health Organization. *eHealth* Tools and Services: Needs of the Member States [online]. Geneva, Switzerland: WHO; 2006 [cited on 2011 March 12]. Available at:
        http:/www.who.int/goe/publications/*eHealth*_tools_services/en/index.html.

14.   Economic Commission for Latin America. *Salud electrónica en América Latina y el Caribe: Avances y desafíos* [*eHealth* in Latin America and the Caribbean: Progress and Challenges [online]. Santiago, Chile: ECLAC; 2010 [accessed 2011 March 12]. Available [in Spanish] at:
        http:/www.cepal.org/publica ciones/xml/5/41825/di-health-electrinica-LAC.pdf.

15.   Pan American Health Organization. *eHealth* Policy in Latin America and the Caribbean: Summary of Preliminary Results (Draft). Washington, D.C.: PAHO; 2010.

16.   Pan American Health Organization. Proposed Strategic Plan 2008-2012 [online]. Washington, D.C.: PAHO; 2007 [accessed 2011 March 12]. Available at:
        http://www.paho.org/English/GOV/CSP/od328-full-e.pdf.

17.	United Nations. Millennium Development Goals of the UN [online]. New York: C2008-2010, United Nations [accessed 2011 March 2]. Available at: http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators%2fOfficialList.htm.

18.	Pan American Health Organization. Health Agenda for the Americas 2008-2017 [Internet]. Washington, D.C.: PAHO; 2007 [accessed 2011 March 12]. Available at:
http://www.paho.org/English/DD/PIN/Health_Agenda.pdf.

51st DIRECTING COUNCIL
63rd SESSION OF THE REGIONAL COMMITTEE

Washington, D.C., USA, 26-30 September 2011

Provisional Agenda Item 4.10

CD51/13 (Eng.)
Annex A
ORIGINAL: SPANISH

PROPOSED RESOLUTION

STRATEGY AND PLAN OF ACTION ON *eHEALTH*

THE 51st DIRECTING COUNCIL,

Having reviewed the report of the Director, *Strategy and Plan of Action on eHealth* (Document CD51/13),

Recognizing that the review of the current situation indicates that the implementation of *eHealth* in the countries of the Americas hinges on two basic conditions: the existence of efficient means for formulating and implementing *eHealth* strategies and policies (technical viability); as well as the existence of practical procedures and simple, affordable, and sustainable instruments (programming and financing viability);

Understanding that the objective is to improve the coordination and delivery of services in the health sector, with a view to increasing efficiency, availability, access, and affordability, thus making it possible for the sector to make adjustments and anticipate new contexts in the field of health;

Bearing in mind that the document "*Health-for-all policy for the twenty-first century*" (1998), prepared by WHO, recommended the appropriate use of health technology within the general health-for-all policy and strategy; World Health Assembly resolution WHA51.9 (1998) on cross-border advertising, promotion, and sale of medical products through the Internet; the Agenda for Connectivity in the Americas and Plan of Action of Quito (2003); the United Nations World Summits on the Information Society

(Geneva, 2003; and Tunis, 2005); WHO Executive Board resolution EB115.R20 (2005) on the need to formulate *eHealth* strategies; Resolution WHA58.28, adopted at the 58th World Health Assembly, which established the linchpins of the WHO *eHealth* strategy; and the eLAC Strategy 2007-2010 of the Economic Commission for Latin America and the Caribbean;

Considering the ample experience of the Region of the Americas in veterinary public health programs;

Noting that PAHO has collaborated with the countries of the Region to establish the conceptual underpinnings, techniques, and infrastructure necessary for developing national *eHealth* programs and policies;

Recognizing the cross-cutting nature of this strategy and its complementarity with the objectives of the PAHO Strategic Plan 2008-2012 (*Official Document No. 328*);

Considering the importance of having an *eHealth* strategy and plan of action in place to enable the Member States to effectively and efficiently improve public health in the Region, through the use of innovative information and communication technology tools and methodologies,

RESOLVES:

1.   To endorse the Strategy, approve the *eHealth* Plan of Action, and support its consideration in development policies, plans, and programs, as well as in the proposals and discussions on the national budget, thereby creating the conditions to respond to the challenge of improving public health in the Region through the use of innovative information and communication technology tools and methodologies in their respective countries.

2.   To urge the Member States to:

(a)   give priority to the use of innovative information and communication technology tools and methodologies, with a view to improving human and veterinary public health in the Region, including public health administration;

(b)   prepare and implement interministerial policies, plans, programs, and interventions based on the Strategy and Plan of Action, making the necessary resources and legal framework available and focusing on the needs of at-risk populations in vulnerable situations;

(c)   execute the Strategy and Plan of Action, as appropriate, within a framework made up of the health system and information and communication technology services, emphasizing interprogrammatic collaboration and intersectoral action, while monitoring and evaluating program effectiveness and the allocation of resources;

(d)   promote greater competencies among policymakers, program managers, and health care and information and communication technology service providers, with a view to formulating policies and programs that facilitate the development of efficient, quality, and people-centered health services;

(e)   promote internal dialogue within and coordination between ministries and other public-sector institutions and encourage the forging of partnerships among government, the private sector, and civil society as a means of building national consensus and facilitating the sharing of experience on cost-effective models; moreover, ensure the availability of standards for quality, safety, interoperability, and ethics, while respecting the principles of information confidentiality, equity, and equality;

(f)   support the capacity to generate information and research for the development of strategies and the implementation of evidence-based models;

(g)   establish an integrated system to monitor, evaluate, and ensure accountability for policies, plans, programs, and interventions, making it possible to increase the surveillance and rapid response capacity for diseases, as well as human and veterinary public health emergencies;

(h)   undertake reviews and internal analyses of the relevance and viability of this Strategy and Plan of Action, based on priorities, needs, and national capacity.

3.   To request to the Director to:

(a)   support coordination and implementation of the Strategy and Plan of Action on *eHealth* at the national, subregional, regional, and inter-institutional levels and facilitate technical cooperation both to and among countries for the preparation and implementation of their national plans of action;

(b)   collaborate with the Member States on the implementation and coordination of this Strategy and Plan of Action, furthering its cross-cutting nature through the program areas and different regional and subregional contexts of the Organization;

(c)   facilitate the dissemination of studies, reports, and solutions to serve as models for *eHealth*, so that, with the appropriate modifications, they can be used by the Member States;

(d)   promote the formation of national, municipal, and local partnerships with other international organizations, scientific and technical institutes, nongovernmental organizations, organized civil society, the private sector, and other entities to facilitate the sharing of capacities and resources and thus increase compatibility between different administrative, technology, and legal solutions in the area of *eHealth*;

(e)   promote coordination between the Strategy and Plan of Action and similar initiatives of other international technical cooperation and financing agencies;

(f)   report periodically to the Governing Bodies on the progress and difficulties encountered in the implementation of this Strategy and Plan of Action, as well as its adaptation to specific contexts and needs.

Report on the Financial and Administrative Implications for the Secretariat of the Resolutions Proposed for Adoption

1. Agenda item: 4.10: Strategy and Plan of Action on *eHealth*

2. Linkage to program budget:

(a) Work area: Knowledge Management and Communication

(b) Expected result:

Strategic Objective 11: To strengthen leadership, governance, and the evidence base of health systems.

RER 11.1: Member States supported through technical cooperation to strengthen the capacity of the national health authority to perform its steering role; improving policy analysis, formulation, regulation, strategic planning, implementation of health system changes; and enhancing intersectoral and inter-institutional coordination at the national and local levels.

RER 11.2: Member States supported through technical cooperation for improving health information systems at regional and national levels.

RER 11.3: Member States supported through technical cooperation to increase equitable access to, and dissemination and utilization of, health-relevant information, knowledge and scientific evidence for decision-making.

Strategic Objective 12: To ensure improved access, quality, and use of medical products and technologies.

RER 12.1: Member States supported through technical cooperation to promote and guarantee equitable access to medical products, health technologies, and the corresponding technological innovation.

3.   Financial implications:

(a)   Total estimated cost for implementation over the life cycle of the resolution (estimated to the nearest US$10,000; including staff and activities):

The Pan American Health Organization will need collaboration from other United Nations agencies and other interested institutions in order to implement the Plan.

During the period 2012-2017, the estimated annual cost for implementing the Plan of Action is $550,000. This figure would increase by $150,000 during the third and last years of the Plan to account for evaluation tasks. This cost includes the contracting of additional staff and implementation of activities at the regional, subregional, and national levels (e.g., technical cooperation, studies, workshops, meetings, campaigns, and monitoring and evaluation activities).

It is important to bear in mind that implementation of the Plan of Action on *eHealth* will result in substantial cost savings with respect to health services delivery, organization, and evaluation, as well as procedures associated with epidemiological surveillance and the analysis of public health data.

With respect to the planning stage, the Member States should prepare cost estimates for implementing the Plan of Action in their countries and make the necessary budgetary adjustments to that end.

(b)   Estimated cost for the biennium 2012-2013 (estimated to the nearest US$10,000; including staff and activities):

$550,000 per year, increasing by $150,000 in the third and last years.

- Staff: $250,000.
- Activities: $300,000.
- Evaluation: $150,000 (years 3 and 5).

(c)   Of the estimated costs noted in b), what can be subsumed under existing programmed activities? Approximately 15% could be included.

4. Administrative implications:

(a)   Indicate the levels of the Organization at which the work will be undertaken:

Regional, subregional, and national.

(b)   Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):

In order to meet the stipulated objectives, a full-time *eHealth* expert would needed to coordinate a regional *eHealth* laboratory, as well as another full-time expert on information

management and *eHealth*, to provide cross-cutting support to the laboratory and countries of the Region.

(c) Time frames (indicate broad time frames for implementation and evaluation):

- 2012: Approval and implementation of the Strategy and Plan of Action on *eHealth*.
- 2015: Evaluation of the first measures adopted.
- 2017: Final evaluation of the implementation of the Strategy and Plan of Action on *eHealth*.

**ANALYTICAL FORM TO LINK AGENDA ITEM
WITH ORGANIZATIONAL MANDATES**

1. **Agenda item:** 4.10: Strategy and Plan of Action on *eHealth*

2. **Responsible unit:** Knowledge Management and Communication

3. **Responsible staff member(s):** Marcelo D'Agostino, Myrna Martí, Ana Lucia Ruggiero, and David Novillo (document is a collaborative study of the PAHO Working Group, United Nations agencies, international experts, and other partners).

4. **List of collaborating centers and national institutions linked to this agenda item:**

- National institutions charged with governance and implementation of health programs, innovation, information and communication technology, academic institutions, etc.

- Civil society organizations

- Organization of American States (OAS)

- Economic Commission for Latin America and the Caribbean (ECLAC)

- Latin American and Caribbean Economic System (SELA)

- Latin American Advanced Networks Cooperation (RedCLARA)

- University Telemedicine Network of Brazil (RUTE)

- National Library of Medicine of the United States (NLM)

- World Bank

- Inter-American Development Bank

- International Development Research Centre (IDRC)

- UN Foundation

- mHealth Alliance;

- Professional medical informatics associations, such as the International Medical Informatics Association (IMIA);

- All WHO Collaborating Centers working on the use of information and communication technologies in the field of health;

- Ministries and secretariats of health;

- Ministries and secretariats of industry, innovation, or technology;

- Ministries and secretariats of education;

- Universities

- Nongovernmental Organizations

5. Link between this agenda item and *Health Agenda for the Americas 2008-2017*:

The agenda item is linked to the principles/values and areas of action described in the Health Agenda for the Americas.

Principles and values:

Acknowledging that the Region is heterogeneous, and that the nations and their populations have different needs and sociocultural approaches to improving health, this Agenda respects and adheres to the following principles and values:

(a) *Human rights, universality, access, and inclusion*. The constitution of the World Health Organization states that: "enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition...." In order to make this right a reality, the countries should work toward achieving universality, access, integrity, quality and inclusion in health systems that are available for individuals, families, and communities. Health systems should be accountable to citizens for the achievement of these conditions.

(b) *Pan American solidarity*. Solidarity, defined as collaboration among the countries of the Americas to advance shared interests and responsibilities in order to attain common targets, is an essential condition to overcome the inequities with regard to health and to enhance Pan American health security during crises, emergencies, and disasters.

(c) *Equity in health*. The search for equity in health is manifested in the effort to eliminate all health inequalities that are avoidable, unjust, and remediable among populations or groups. This search should emphasize the essential need for promoting gender equity in health.2

(d) *Social participation*. The opportunity for all of society to participate in defining and carrying out public health policies and assessing their outcomes is an essential factor in the implementation and success of the Health Agenda.

Areas of action:

- Strengthening the national health authority;

- Tackling health determinants;

- Increasing social protection and access to quality health services;

6. Link between agenda item and Strategic Plan 2008-2012:

The Strategy and Plan of Action on *eHealth* are directly linked with **Strategic Objective 11**: To strengthen leadership, governance, and the evidence base of health systems.

RER 11.1: Member States supported through technical cooperation to strengthen the capacity of the national health authority to perform its steering role; improving policy analysis, formulation, regulation, strategic planning, implementation of health system changes; and enhancing intersectoral and inter-institutional coordination at the national and local levels.

Specifically, it will contribute to Region-wide **Expected Results (RER) indicator 11.1.2**: Number of countries that have formulated policies, mid-term and long-term plans or defined national health objectives.

RER 11.2: Member States supported through technical cooperation for improving health information systems at regional and national levels.

Specifically, it will contribute to **RER indicator 11.2.1:** Number of countries that have implemented processes to strengthen the quality and coverage of their health information systems.

RER 11.3: Member States supported through technical cooperation to increase equitable access to, and dissemination and utilization of, health-relevant information, knowledge, and scientific evidence for decision-making.

Specifically, it will contribute to **RER indicator 11.3.3:** Number of countries that have access to essential scientific information and knowledge, as measured by access to Virtual Health Libraries (VHL) at national and regional levels.

The Strategy and Plan of Action on *eHealth* are also linked with **Strategic Objective 12:** To ensure improved access, quality, and use of medical products and technologies.

RER 12.1: Member States supported through technical cooperation to promote and guarantee equitable access to medical products, health technologies, and the corresponding technological innovation.

Specifically, it will contribute to **RER indicator 12.1.1:** Number of countries that have implemented policies promoting the access to, or technological innovation for, medical products and health technologies.

7. Best practices in this area and examples from countries within the Region of the Americas:

- According to estimates, in 2010, 47% of the countries in the Region had *eHealth* policies in place.
- Some countries, Canada, Mexico, Peru, and the United States among them, have made significant progress in *eHealth* and have future *eHealth* projects on their agendas.

• Based on the Third Ministerial Conference on the Information Society in Latin America and the Caribbean (Lima, 21-23 November 2010), some examples of *eHealth* best practices include:

  o Argentina has a network administered by the Ministry of Health that 43 hospitals, and it is also working on telemedicine projects.
  o Brazil has a national network connecting 57 hospitals and providing infrastructure, education, research, and integration support.
  o Costa Rica has developed initiatives linked to consultations with specialists and emergencies.
  o Jamaica has carried out telemedicine projects in medical specialty areas such as dermatology, oncology, psychiatry, and home medical services.
  o Mexico is working to implement an electronic medical records program between 2007 and 2012 and has regulations in place governing the use of auxiliary electronic media for the storage of health data.
  o Panama has been working with telemedicine in rural areas.
  o Trinidad and Tobago has a program of free access to medication, in which some 40,000 chronic disease patients participate.
  o The Bolivarian Republic of Venezuela has a system of standardized medical records that use free software platforms.
  o Canada and Brazil are collaborating closely with other international institutions in the preparation of *eHealth* protocols.

8. Financial implications of agenda item:

The Pan American Health Organization will require collaboration from other United Nations agencies as well as other interested institutions in order to implement the Plan.

During the period 2012-2017, the estimated annual cost for implementing the Plan of Action is US$ 550,000 (a figure that would increase by $150,000 in the third and last years of the Plan, to account for evaluation tasks). This cost includes the contracting of additional staff and the implementation of activities at the regional, subregional, and national levels (e.g., technical cooperation, studies, workshops, meetings, campaigns, and monitoring and evaluation activities).

It is important to bear in mind that the implementation of the Plan of Action on *eHealth* will result in substantial cost savings in health services delivery, organization, and evaluation, in addition to procedures associated with epidemiological surveillance and the analysis of public health data.

- - -