Universal Health Coverage, eHealth in support of

Najeeb Al-Shorbaji
Director, Knowledge Management and Sharing Department
World Health Organization
The right to health

- The 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. WHO Constitution
Universal Health Coverage

“Universal health coverage is the single most powerful concept that public health has to offer. Universal coverage is relevant to every person on this planet. It is a powerful equalizer that abolishes distinctions between the rich and the poor, the privileged and the marginalized, the young and the old, ethnic groups, and women and men. Universal health coverage is the best way to cement the gains made during the previous decade. It is the ultimate expression of fairness. This is the anchor for the work of WHO as we move forward.”

Dr Margaret Chan, Address to the Sixty-fifth World Health Assembly, May 2012.
Universal Health Coverage

• The goal of universal health coverage is to ensure that all people obtain the health services they need—prevention, promotion, treatment, rehabilitation and palliation—without risk of financial ruin or impoverishment, now and in the future.

Is Universal Health Care a Human Right?

- "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control"

Article 25 of the U.N. Universal Declaration of Human Rights (1948)
The three dimensions of UHC

Three dimensions to consider when moving towards universal coverage:

- Extend to non-covered
- Reduce cost sharing and fees
- Include other services
- Direct costs: proportion of the costs covered
- Services: which services are covered?
- Population: who is covered?

Current pooled funds
What does this mean in terms of information and information technology?

• "All people" means complete civil registration, death and birth registration and nation-wide health record;

• "Health services" means health education, promotion, disease surveillance, service delivery, disease registries, inventories, …

• "Cost" means proper financial management, cost containment, and economy of scale.
What is eHealth?

• Health is an information-intensive sector as all decisions and actions require timely, current, accurate, comprehensive, and understandable information;

• eHealth is 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. World Health Assembly Resolution, 2005

• Where and how does eHealth contribute to achieving UHC?

Universal Health Coverage, eHealth in support of...
Health system obstacles to UHC and ICT based solutions

- Poor leadership, governance: transparency through wide, free and open access to information;
- Inappropriate or inadequate financing and poor accountability: financial control, household surveys and auditing;
- Poor service delivery: empower patients, reaching out to remote areas, mobile health, alert system, queuing;
- Inadequate or mismanaged information: Data to information to knowledge and evidence;
Health system obstacles to UHC and ICT based solutions

- Inadequate, misallocated and mismanaged human resources: eLearning, continuous education, access to literature, self-learning, best practices, networking, collaboration;
- Lack of medicines and other health technologies: personalized medicine, home care, remote monitoring, health education;
- Poor infrastructure: tele-health, sharing of resources, networking.

Universal Health Coverage, eHealth in support of
Knowledge management and eHealth in support of UHC

- Information infrastructure
  - Physical infrastructure: hardware, wiring, broadband, satellite, etc.
  - Software and applications: electronic health records, surveillances, eLearning, access to literature, etc.
  - Human resources development;
  - Enabling environment: governance, policies, legal frameworks, legislation, etc.
Knowledge management and eHealth in support of UHC

• Development, maintenance and operation of the shared healthcare information infrastructures enables seamless data flow and information exchange between healthcare providers and with clients to support Integrated People-Centred Services.

• These plans should aim to contribute to the objectives of accessibility, availability, acceptability and affordability of integrated health services;

• The plans should provide all health-care facilities and mobile units with basic data processing and communication technology including the appropriate – open-standards, the software and hardware in a networked environment.
WHO actions

• WHO will assist in:
  • development, adaptation and deployment of health information infrastructure requirements and standards to enable countries to have sustainable and interoperable health information applications and e-services;
  • Support of timely and secure access to data on personal and public health, and resources enabling data-driven, evidence-based decision-making and health-care delivery as a central objective of UHC.
WHO actions

• WHO will assist in:
  • Building partnerships and networks at regional and global levels ensuring engagement by member states, non-state parties, private sector and academic/research institutions;
  • Collaborating with specialized agencies to develop and deploy standards and build the evidence and knowledge base.
WHO actions

- Providing technical support and building capacity;
- Providing leadership;
- Setting norms and standards;
- Shaping the research agenda;
- Articulating policy options;
- Monitoring and health trends.

Actions are coordinated at:
- Global level:
- Regional level;
- Country level.
Profile of Normative Work and Global eHealth Activities

WHO Headquarters

Dr. Ramesh S. Krishnamurthy
Milestones in eHealth
eHealth Milestones

Recognized the value that ICT bring to health

Recognized the value of adoption of standards for interoperability and Health on the Internet

eHealth work streams at WHO Headquarters
eHealth work streams

- eHealth Governance
- Standardization and Interoperability
- eLearning
- Global Observatory for eHealth
- ePortuguese Network
eHealth Governance
eHealth Governance

National eHealth Strategies:
WHO and the International Telecommunication Union have produced a comprehensive guide for the development of a national eHealth vision, action plan and monitoring framework.
eHealth Governance

• Support to implementation includes regional and country technical assistance and training.

• Strategic review and guidance regarding emerging issues on the global health Internet.
eHealth
Standardization and Interoperability
Standardization and Interoperability

- Facilitates the *Global Forum on eHealth Standardization and Interoperability*
- **Next Forum:** January 2014 Inter-Ministerial Policy Dialogue on eHealth Standardization and Interoperability
Standardization and Interoperability

• Normative work:
  – WHO Handbook on eHealth Standardization and Interoperability
  – Health Workforce Registry Minimum Data Elements

• Provide guidance to Member States in assessing and implementing interoperability standards for eHealth systems and services.
eLearning
eLearning – Health Academy

http://www.who.int/healthacademy/courses/en/
eLearning

- Provide guidance and technical support for effective use of eLearning as an integral part of pre-service and in-service training of health workforce.
- Expand Health Academy program to include additional training materials targeted at school-aged children and implement the Academy in additional Member States.
Global Observatory for eHealth
Global Observatory for eHealth

2012: Management of patient information: Trends and challenges in Member States


Products based on the findings of the global surveys on eHealth
Global Observatory for eHealth

• Currently conducting special survey among CoIA countries on the use of eHealth for maternal and child health.

• Joint report with ITU to be published in September 2013.

• Third Global Survey on eHealth to be conducted in 2014.
ePortuguese Network
ePortuguese Network

- Strategy to strengthen collaboration among Portuguese-speaking countries in the areas of health information and capacity building of human resources for health.
- Coordinates South-South cooperation to strengthen health systems among Portuguese-speaking countries (Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal, Sao Tome and Principe and Timor-Leste)
ePortuguese Network

The Global South-South Development Expo 2012 in Vienna recognized the seven-year-old WHO programme as an example of South-South and triangular cooperation.
Thank you
eHealth Priorities and Practice

Mr Mark Landry
Team Leader
Health Information, Evidence & Research

World Health Organization
Western Pacific Regional Office
eHealth Technical Support Priorities

World Health Organization

Western Pacific Region

governance & multi-sectoral engagement
strategic planning & financing
policy & regulatory environment
information quality & use
infrastructure & ICT readiness
human capital development
system & data interoperability
eHealth Collaborative Communities

**Pacific Health Information Network (PHIN)**

- **Focus:** advocacy, analysis and use of reliable health information, governance, capacity building
- **Membership:** HIS and eHealth professionals from 17 Pacific island countries and territories

- [www.phinnetwork.org](http://www.phinnetwork.org)

**Asia eHealth Information Network (AeHIN)**

- **Focus:** governance, strategies and policies, standards-based architectural approaches, capacity building
- **Membership:** 250+ eHealth and HIS professionals from 25 countries in South and Southeast Asia

- [www.aehin.org](http://www.aehin.org)
Regional approach to country impacts:

• Provide better technical support
• Operationalize global norms and standards
• Enhance leadership, strategies, plans, and M&E
• Increase knowledge exchange and sharing
eHealth in Practice

Technical
ITU, UNICEF, UN ESCAP, universities, other

Programs
• Commissions on Information and Accountability (CoIA) and Life-Saving Commodities (CoLSC)
• Civil registration & vital statistics (CRVS)
eHealth in Practice

Development
ADB, AusAID, GIZ, GF, Norad, PEPFAR, USAID, WB

Principles
• Country ownership & leadership
• Strategic reuse
• Openness
• Open architecture and standards
• Monitoring and evaluation

World Health Organization
Processes
• Accessible eHealth standards in low/middle income countries
• Implementation support
• Standards stacks, HIEs

Informatics
HL7, IHE, ISO TC215, IHTSDO, IMIA, other
eHealth in Practice

People
- Network of networks
- Technical transfer
- Resource portal & repository (aehin.hingx.org)
- Architectural approaches

Communities
- aIWG, APAMI, HMN, JLN, mHA, HingX, OpenHIE
eHealth in Practice

Technical
ITU, UNICEF, UN ESCAP, universities, other

Informatics
HL7, IHE, ISO TC215, IHTSDO, IMIA, other

Development
ADB, AusAID, GIZ, GF, Norad, PEPFAR, USAID, WB

Communities
aIWG, APAMI, HMN, JLN, mHA, HingX, OpenHIE

Member States

World Health Organization
eHealth to Reach the Unreached

Presented by - Jyotsna Chikersal
Regional Advisor – Health Situation & Trend assessment
World Health Organization, South East Asia Region (SEAR)
Today ICT is a Strategic enabler to Reach the unreached

- The SEAR is home to 26% of the World’s population but only 11 hospital beds are available for every 10,000 population, despite the fact that the region is bearing about 1/3rd Global Disease Burden.

- 2/3rd population of the region is living in rural or mountainous areas

- Business as usual has not succeed in “Reaching the Unreached”- Its now time for Innovative approaches like eHealth to improve QOC

- WHO supported several eHealth initiatives in SEAR in last decade
WHO supported in DPR Korea ....

Establishment of national telemedicine system

4 central hospitals
10 provincial hospitals
10 provincial maternity hospitals
189 city, county hospitals

A total of 213 hospitals covered
Successful Establishment of the Telementoring system for Surgery

As of June 2013 all provincial, city, county hospitals are covered by the telementoring system for surgery.

Implementation of DHIS and OpenMRS are being Piloted.
Effectiveness of telemedicine service

Shortened lead time for treatment
Average of 3.1 days per patient

Reduction of case referral

Reduction in the rate of case referral, 25.2%

2009년  2012년
Tele education on medicine to a total of 144,506 audiences

1432 times
(2010.2-2013.6)
**DPR Korea’s Experiences from the Implementation of Telemedicine**

*First*, adoption of appropriate national policy and guidance is important for the successful establishment of the telemedicine system.

*Second*, telemedicine is an effective mode of service delivery contributing to the improved quality of care for the people.

*Third*, establishment and upgrading the standard of the telemedicine service can be successful when it is implemented with a good strategy and a plan defining clear objectives to be achieved through various stages of implementation.
Bangladesh is an Emerging Economy with many Success Stories against the odds

- MDG 1 poverty reduction target (28.5% poverty rate) ✔
- MDG 4 & 6 targets ✔
- MDG 5 target Well on track
- UN eHealth Award Y2011
- One of 11 next economic wave countries after BRIC (Ref: Goldman-Sachs) ✔
- UN MDG 4 Award 2010
- GAVI Award 2009 & 2012
- UN South-South (eHealth) Award 2011
Bangladesh has shown remarkable change in last 5 years.

Digital Bangladesh Vision 2021 was the driving force.

**Challenges**
- Huge population
- Resource constraints
- Competing health priorities
- Shortages of skilled ICT staffs

**Solutions:**
- Simple
- Low cost
- Innovative
- Locally appropriate
- Scalable
Bangladesh
(Pop. ~150 million)

Divisions (7)
Pop. 23 million

Districts (64)
Pop. 2.5 million

Sub-districts (483)
Pop. 0.3 million

Unions (4,501)
Pop. 35,500

Wards (13,503)
Pop. 12,000

18,000 community clinics, Handheld being provided
• DHIS 2.x deployment to national scale
• Users
  • >20,000 public facilities
  • All CHWs

We are also automating hospitals
Dedicated Telemedicine Centers

- **Telemedicine**: A call-centre approach with 24-hour doctor has been set up, & is linked to 582 sites, including all district/sub-district hospitals.

- These sites are linked to 9 centers.

- In 1.5 years over 5,800 consultations provided.

<table>
<thead>
<tr>
<th>No. of consultations provided (9 centers)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Y2012 (Jan-Dec)</td>
<td>2,812</td>
</tr>
<tr>
<td>Y2013 (Jan-Jun)</td>
<td>2,626</td>
</tr>
<tr>
<td>Total (1.5 yrs)</td>
<td>5,818</td>
</tr>
</tbody>
</table>
Other eHealth programmes in Bangladesh

- Remote Time Attendance
- Complaint-Suggestion Box
- Web & social media portals
- mHealth – Aponjon, SMS based pregnancy advice, SMS-Stat
- Population EHRs
- GIS
- Priority disease surveillance
- Client education
- eLearning
Bhutan: Telemedicine for Service Delivery is an important option

- **2000-05:** WHO supported Telemedicine implementation in 6 hospitals, Expanded to 10 more sites by JAICA
- **2008:** SAARC project established at National hospital for Teleconsultation & CME sessions from 2 Indian super-speciality hospitals
- **2009:** Rural Telemedicine Project (RTP) at 14 sites
- **2010:** Health Help Centers a success story for G to C emergency services & health advise using a Decision support system
- **2011:** Review done by WHO & medium-term strategy developed

**Key challenges:**
- **Budget constrains:** Expensive medical equipment, recurrent ICT costs
- **Human Resources:** Low technological literacy of HWF, high staff turnover, poor commitment, low investment in “People” aspects of Change management
- **Infrastructure:** Poor Internet coverage, power outages, maintenance problems

**A Way Forward:** *(Resource mobilization.. Resource mobilization.. Resource mobilization.. Resource mobilization..)*
- **Tele consultation** – between remote medical officers and specialists using mobile & Email – being setup with the support of WHO: Simple solution
- **Need of a strong policy framework** to guide the utility of the service.
- **Conduct evaluation** of the impact of the Telemedicine services
eHealth in India began in late 90’s in the form of indigenous technology development for HMIS & Telemedicine.

- **2010: Mother & Child Tracking System (MCTS):**
  - Developed by MoHFW to track every pregnant woman & child for healthcare delivery services.
  - Registered >10 m pregnant women & 5 m children.

- **All health facilities being inter-connected with the high speed band 100MB B/W.**
  - For Medical college network,
  - National Rural Telemedicine Network,
  - m-Health and mobile health on wheels.

- **Initiatives of tele-education, tele-consultation, tele-follow-up and other tele health care services already in place in various institutions in Government Central and State as well as the private sector.**

- **Establishment of National EHR and National EMR Standards is in final stages of notification.**

- **National Population Register under-establishment**
Telemedicine pilots have been initiated in Sri Lanka and Nepal

**Sri Lanka:**
- Telemedicine pilot project estd in 2002-03, was used during Tsunami at one site -5 districts in collaboration with WHO.
- Joint-venture with hospital in India offering cross-border consultations to patients. X-rays, scans & E.C.G
- HIS plan funded by WB, TA by WHO and other Partners.

**Nepal Telemedicine Pilot & DHIS:**
- 30 district hospitals connected for Tele-Dermatology, Tele-Radiology and Tele-Pathology
  - 120 consultations a day
- MoH approved implementation of DHIS & exploring Open-MRS
- Key Stakeholders of CRVS keen on piloting Integrated Cause-of-Death & Birth Reporting System
Maldives & Timor-Leste developing eHealth Strategy & Roadmap

**Maldives**
- Implemented SIDAS at Atoll level for data collection, analysis & GIS
- 2011: National eHealth strategy developed – implementation plan needed
- 4 Regional Hospitals & 35 Remote sites connected for telemedicine

**Timor-Leste**
- Implementing Swasthya Slate produced by PHFI to perform 25 diagnostic tests using an android, Data uploaded to EMR.
- WHO technical assistance to develop eHealth Roadmap for Nation-wide implementation

6 Countries have planned the development of National eHealth Strategy – workshop planned in sept 2013
Regional strategy to improve COD & Birth Reporting with ICT

Objectives:

1. Improving quality & completeness of cause-of-death data:
   • For community deaths: Verbal Autopsy.
   • For health facility deaths: MCCD using the International Death Certificate
   • For unnatural deaths: incorporate police data

2. Reporting maternal deaths to MDSR system in 24 hours

3. Birth Reporting by Community Health Workers.

4. Reach-out to marginalized communities to capture data & improve their access to health programs.

5. Regular Data Quality Assessment & Compilation of VS

6. Linkage with CRVS
**Vision:** By 2020, eHealth is established as the bedrock of health system to achieve desired health outcomes in the SEA Region.

**Mission:** Assist Member States in their efforts to establish eHealth as an integral part of the transformation and improvement of health systems in the equity and equality in delivery of health care to all population, in an effective, efficient and responsible manner.

**Goal:** The goal of the strategy is to provide a harmonized and comprehensive eHealth strategic objectives that paves the way for building sustainable eHealth architecture by 2020 and provides support for medium-term eHealth priorities of the public health sectors in the region.
Strategic Area 1: Policy and Strategy

Promote & support the formulation, execution, and evaluation of effective, comprehensive, and sustainable public policies and strategies on the use and implementation of ICT in the health and allied sectors.

Objective 1.1 - Support the formulation and adoption of people-centered eHealth public policies and strategies and its implementation.

Objective 1.2 – Encourage countries to set eHealth as a political priority at the national and regional levels.

Objective 1.3 - Support the establishment of a regional & national intra/inter-sectoral network to participate in the formulation of eHealth policies & standards, as well as decision-making in this area.

Objective 1.4 - Establish a regional system to review and evaluate eHealth policies.
Strategic Area 2: Tools and Methods

*Improve public health through the use of tools & methodologies based on innovative ICT.*

**Objective 2.1** - Improve organizational and technological infrastructure for eHealth.

**Objective 2.2** - Promote the use of ICT for strengthening national public health information systems including drug and logistics management system, financial systems and Electronic Medical Records (EMR).

**Objective 2.3** - Promote the sustainable, scalable and interoperable development of eHealth-centered programs for health service delivery.

**Objective 2.4** - Encourage countries to utilize eHealth applications to strengthen their CRVS and set-up close collaborations with relevant local agencies to share vital statistics electronically.
Strategic Area 3: Collaboration and Partnership

Promote and facilitate horizontal cooperation among countries and all key stakeholders for development of eHealth agenda for the Region.

Objective 3.1 - Promote intersectoral cooperation, both within each country and among member countries.

AeHIN can help in a big way ....

Objective 3.2 – Promote Health data standards and interoperability.

Objective 3.3 – Encourage countries to adopt a suitable legal and regulatory framework that supports the use of ICT in the health sector.
Promote knowledge management, education in ICT, and better access to information as a key element for health promotion

Objective 4.1 - Promote training in ICT in medical schools/universities and among health workforce.

Objective 4.2 – Ensuring the updating of the knowledge base and continuous education of health care providers through eLearning

Objective 4.3 - Utilize eHealth to provide reliable, quality information on health education and promotion, and disease prevention to the mass population.

Objective 4.4- Promote research using eHealth tools

Objective 4.5- Facilitate the dissemination, communication, and widespread distribution of health information, with emphasis on emergencies, through social networks.
The way forward

- Encourage countries to develop National eHealth Strategy to establish Nation-wide programmes to “Reach the Unreached” rather than just pilots or projects.

- Finalize the regional strategy endorsement by WHO regional committee.

- Advocate sustainable financial & political support by convening multisectoral engagement with all key stakeholders.

- Government should hold full ownership for eHealth - establish coordination mechanism to ensure participation of all national and international stakeholders.

- Member countries should adopt eHealth Policies (eg. Privacy and confidentiality) eHealth Architecture, a roadmap for adoption of HDS etc.

- Research studies to identify socio-economic and medical benefits of eHealth and efficiency, effectiveness and measurable progress of eHealth strategy.

- Establish more WHO CC for eHealth.
Use of Innovation is essential to “Reach the unreached”
The role of eHealth in achieving Universal Health Coverage within the European Region

Clayton Hamilton, eHealth and Innovation
WHO Regional Office for Europe
http://www.euro.who.int
"It seems that the stars are aligned. These glimmers of facts, figures, innovation and needs are converging on the year 2013. And the result promises to be an inflection point for digital health. The curve of innovation will shift and place us all on a new course for managing disease and wellness." (Forbes - Health Critical)

John Nosta, CCO Maven Communications, #1 Kred-ranked Social Media influencer in health
Why Universal Health Coverage?

“In 2005, all WHO Member States made the commitment to achieve universal health coverage. The commitment was a collective expression of the belief that all people should have access to the health services they need without risk of financial ruin or impoverishment. Working towards universal health coverage is a powerful mechanism for achieving better health and well-being, and for promoting human development.”

Overview of the WHO European Region

53 Countries

900 million population
Diversity of wealth within Europe

The WHO European region has a high diversity in terms of wealth distribution among its nations:

• 33 countries are classified as High-income
• 20 countries are classified as either Upper-middle, Lower-middle or Low income

*World Bank, Gross National Income per capita index, 2013
Health 2020: a European policy framework supporting action across government and society for health and well-being
The role of WHO in eHealth in Europe

WHO’s key undertaking within eHealth in Europe is to provide independent advice and assistance to countries towards the long-term development of sustainable national eHealth solutions, in particular, in relation to strategic health information gathering and analysis.
In Europe, WHO delivers on this mandate in 3 ways:

• As a knowledge-broker and facilitator between nations and the International Community at large.

• By developing and sharing best practices and standards precipitated from successful eHealth implementations.

• By working directly with Ministries of Health to address their technical and strategic needs for eHealth.
The landscape of eHealth in Europe

- An increasing cost of healthcare, decline in the number of healthcare workers and an increasingly mobile population is leading to a voracious appetite for “everything e”.

- Broadband penetration and mobile network usage is high with data costs rapidly declining for both.

- Concerted push for developing patient-centric healthcare systems and increasing measures for patient safety.

- A majority of countries are racing to implement or refine systems to manage Electronic Health Records.

- Health information is still (in general) extremely “siloed” and Integrated Health Information Systems are being sought.
Common challenges observed in Europe

• Ownership and governance of eHealth, developing and delivering on national eHealth strategies and managing the burden of ongoing system development and maintenance.

• Developing and adopting appropriate legislation to allow for eHealth.

• Ensuring security and privacy, identity management and ethical issues are addressed.

• Workforce issues: education, awareness and retraining.

• Acceptance of solutions by health professionals.
The link: eHealth & Universal Health

• There is an increasing push for accessibility to one’s own health data and for remote interaction with healthcare workers...

• ...coupled with the exploding trends (and availability) of mHealth in all countries...

• eHealth is very clearly becoming the *platform for accessibility to health services by populations – making it the #1 enabler for Universal Health Coverage*. This represents a paradigm shift away from the rationale for eHealth in terms of cost reduction or efficiency gains.
Predicting the future...

- Increased focus on mHealth solutions, in particular for non-communicable disease treatment and prevention.
- Advent of gaming technology in mobile health-related applications.
- Big (Health) Data to supplement (or replace) traditional data reporting and analysis mechanisms.
- Mainstreaming of Telehealth/Telecare solutions.
- Leading standards for eHealth implementation will emerge and methods of adoption will become clearer.
- Health Internet governance issues will become more prominent, but their resolution will be slow.
Global eHealth Activities
Highlights – 2013-2015

WHO Headquarters

The World Health Assembly (WHA) resolution on eHealth\(^1\) in 2005 was a milestone in recognizing the value that information and communication technologies bring to health. In May 2013, the WHA again emphasized the importance of eHealth\(^2\), supporting fundamental actions from country to global level to make full use of health IT and health information standards for interoperability of eHealth systems.

The eHealth Unit has the following core areas of focus with a select list of priority work items during 2013-2015:

**eHealth Governance**

- National eHealth Strategies: WHO and the International Telecommunication Union (ITU) have produced a comprehensive guide for the development of a national eHealth vision, action plan and monitoring framework.
- Support to implementation includes regional and country technical assistance and training.
- Strategic review and guidance regarding emerging issues on the global health Internet.

**eHealth Standardization and Interoperability**

- Normative work to be published in 2013: WHO Handbook on eHealth Standardization and Interoperability and Health Workforce Registry Minimum Data Elements.
- Facilitates the Global Forum on eHealth Standardization and Interoperability.
- Provide guidance and technical support to Member States in assessing and implementing interoperability standards for eHealth systems and services.

**eLearning**

- Provide guidance and technical support for effective use of eLearning as an integral part of pre-service and in-service training of the health workforce.

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\(^1\) World Health Assembly resolution on eHealth WHA58.28 (http://www.who.int/healthacademy/media/WHAS8-28-en.pdf)

\(^2\) World Health Assembly resolution on eHealth Standardization and Interoperability, WHA66.24 (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R24-en.pdf)
• Expand the Health Academy program (http://www.who.int/healthacademy/en/) to include additional training materials targeted at school-aged children and implement the Academy in additional Member States.

Global Observatory for eHealth

• Currently conducting a special survey among countries targeted by the Commission of Information and Accountability for Women's and Children's health (CoIA) on the use of eHealth for maternal and child health.
• Joint report with ITU to be published in September 2013.
• Third Global Survey on eHealth to be conducted in 2014.

ePortuguese Network

• Strategy to strengthen collaboration among Portuguese-speaking countries in the areas of health information and capacity building of human resources for health.
• Coordinates South-South cooperation to strengthen health systems among Portuguese-speaking countries.

WHO Regional Offices

Regional Office for Africa (AFRO)
http://www.afro.who.int

• Supporting the Ministry of Health of Uganda to finalize the national eHealth policy and strategy.
• Supporting the Federal Ministry of Health of Ethiopia to develop the national eHealth strategy.
• Supporting the Ministry of Health of Lesotho to develop a national eHealth strategy following the WHO National eHealth Strategy Toolkit.
• During the upcoming 63rd Session of the Regional Committee for Africa, the Report of the Secretariat on “Utilizing eHealth solutions to improve national health systems in the African Region” will be presented.

Regional Office for the Americas (AMRO)/Pan American Health Organization (PAHO)
http://www.paho.org/ICT4Health

• Laboratory on eHealth—a space that gathers the latest information, news and projects in the region. Through the Laboratory, PAHO seeks to promote cooperation among countries in sharing best practices, lessons learned and regional resources.
• **eHealth Conversations**— Twelve podcasts, produced by PAHO/WHO, offer recommendations for decision makers and health workers who are looking to integrate the use of information and communication technologies into health initiatives. The digital audio files are available for download for free.

**Regional Office for the Eastern Mediterranean (EMRO)**
[http://www.emro.who.int](http://www.emro.who.int)

- Recent creation of a taskforce composed of experts with extensive knowledge and experience in the development and use of ICT in health, to recommend actions necessary for the region to catch up with, and promote eHealth for the benefit of public health.

- **Kuwait:** Continuous improvement and customization of the Primary Care Information System (PCIS) which was initially developed in year 2000 and has since been extended to provide additional special services and modules such as Dental, Diabetic and Maternity. A Vaccination module was recently added to PCIS to meet WHO’s stipulated guidelines for reaching health standard. Today PCIS runs successfully in 98 health centers. A newly initiated project is the Smart Card Health data retrieval.

- **Saudi Arabia:** A national eHealth strategy was developed in 2011 with a clear vision and a ten years integrated roadmap that includes over eighty projects covering the domains of care for patients, collaboration and measurement, transforming workforce, connection and integration.

**Regional Office for Europe (EURO)**
[http://www.euro.who.int](http://www.euro.who.int)

- **Serbia:** Support to the development of an Integrated Health Information System (EU-IHIS) [http://www.eu-ihis.rs/index_EN.html](http://www.eu-ihis.rs/index_EN.html) for implementation of a Hospital Information System in 19 hospitals in the Capital, Belgrade, as well as design and implementation of a National Electronic Health Record.

- **Moldova:** In joint collaboration with the WHO Collaborating Centre for eHealth and Telemedicine, Tromsø, Norway, provide detailed consultative support to the development of a National eHealth Strategy.

**Regional Office for South-East Asia (SEARO)**
[http://www.searo.who.int](http://www.searo.who.int)

- **Regional eHealth Strategy (draft):** SEARO has developed a draft Regional eHealth Strategy
focusing of 4 Strategic areas: Policy and Strategy, Tools and Methods, Collaboration and Cooperation and Human Resource Development. The strategy also has a Monitoring & Evaluation component.

- **Integrated Cause-of-Death & Birth Reporting System (ICODBRS):** In order to improve quality mortality statistics, based on nationally representative COD data (facilities & community deaths), a concept paper to pilot an e-based birth & death reporting system, as a part of upgrade of routine CRVS systems has been developed. Subsequently, WHO/SEARO would develop a Regional Strategy for improving mortality statistics using routine CRVS.

**Regional Office for the Western Pacific (WPRO)**
[http://www.wpro.who.int](http://www.wpro.who.int)

- **Catalyzed support for peer-to-peer professional networks** for eHealth and HIS professionals in collaboration with other development partners in Asia and the Pacific for accelerating knowledge sharing and learning, strategic reuse of technical resources, and facilitate large scale operationalization of normative eHealth work of WHO with countries:
  - Pacific Health Information Network [http://www.phinnetwork.org](http://www.phinnetwork.org)
  - Asia eHealth Information Network [http://www.aehin.org](http://www.aehin.org)

- **Country HIS and eHealth Strategy and Planning Support:** Undergoing rollout of the new [WHO-ITU eHealth Roadmap Development Toolkit](http://www.who.int) to guide countries with effective planning and implementation of eHealth. Use of the Toolkit is integral to the work of the Commission on Information and Accountability (CoIA) for Women’s and Children’s Health to promote innovation using ICT to impact maternal and child health. Implementation support for enterprise architectural approach to eHealth underway in Cambodia, China, Fiji, Lao PDR, Mongolia, Philippines, Solomon Islands, Vanuatu, and Viet Nam.

- **Technical assistance to countries provided** has generally fallen into five categories: Support country-led functioning of multi-sectoral coordination, Conduct HIS strategic planning, costing, implementation planning, and policy development; Initiate training and capacity building to improve data quality and use; Identify and implement health data standards and promote systems interoperability; and Enable routine HIS strengthening and software implementation to support national monitoring and evaluation frameworks.