Introduction to Draft Regional Strategy (2014-2020) & Call for collaboration on eHealth COIA initiative
eHealth: Use of ICT to improve health outcomes

- As per resolution WHA58.28, adopted at the 58th Session of the WHA in 2005:
  **eHealth is the cost-effective and secure use of ICT in support of health & related fields**

- **A few applications of eHealth:**
  - to extend geographic access to health care
  - to improve data management
  - to facilitate communication between patients and physicians
  - Distance learning and Self-Learning
  - HIS and Surveillance
  - And Many More ……. 
The importance of e-health & urgency to act is growing

- Recommendation of the Commission on Information and Accountability
  - Integrated use of ICT in national HIS and health infrastructure, by 2015

- e-Health / m-Health are increasingly being used in all aspects of health
  - Health promotion, health education, health information, assessments, monitoring, surveillance, etc.
  - Individual patient management and service delivery

- Offers powerful opportunity to bridge the health gap with
  - Increasing mobile phone accessibility
  - Internet and social media
  - Multi-lingual environments

- Coordinated efforts required
  - Multi-sectoral approach - Govt. and partners need to work together
We can address shortage in doctors by leveraging nurses & health workers with Telemedicine service

Bhutan has a gap from WHO standards for health workforce

<table>
<thead>
<tr>
<th>Country</th>
<th>Doctors</th>
<th>Other Health Workers</th>
<th>Total</th>
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<tr>
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<td>India</td>
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<tr>
<td>WHO Benchmark</td>
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</table>

WHO Benchmark: Doctors: 17, Others: 5, Total: 22

...but has a strong nursing and health worker pool to work from

<table>
<thead>
<tr>
<th>Country</th>
<th>Doctors</th>
<th>Other Health Workers</th>
<th>Total</th>
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<tbody>
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<tr>
<td>WHO Benchmark</td>
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WHO Benchmark: Doctors: 25, Others: 5, Total: 30

Life expectancy

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IMR

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<td>Thailand</td>
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<td>Sri Lanka</td>
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<td>Bhutan</td>
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<td>India</td>
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<td>World average</td>
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MMR

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<td>India</td>
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<tr>
<td>Nepal</td>
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<tr>
<td>World average</td>
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“...while there are no gold standards for assessing the sufficiency of the HWF, WHO estimates that countries with < 23 health-care professionals (physicians, nurses and midwives) per 10 000 population will be unlikely to achieve adequate coverage for key primary health-care interventions prioritized by the MDGs...” – WHO - WHS (2009)
Key challenges around eHealth in the SEAR

- Lack of eHealth policy, strategy & legal boundaries to support the national health system
- Uncoordinated investment in ICT in health due to absence of an overarching plan for eHealth
- Duplication of Efforts- A low degree of cooperation, collaboration & sharing across sectors.
- Limited capacity - within the public sector to implement eHealth programs
- Widely differing levels of eHealth maturity across and within countries
- Poor Quality & Disparities in data- Health information systems exist in silos, segmented by disease specific control, health programs or donor-driven initiatives with little interoperability & communication.
- Poor communication infrastructure- lack of broadband connectivity & internet access, prevent use of ICT in health
WHO’s role in strengthening eHealth in the Region

Enabling action areas:
- appropriate legal and regulatory environment
- norms and standards
- access to information
- public-private partnership
- gathering intelligence on eHealth

The Scope of eHealth in the region:
- Health information system (Health informatics, HIS, EMR, HMIS, GIS…etc.)
- Service delivery (telemedicine, telesurgery … etc.)
- Knowledge management (HINARI/HeLLIS…etc.)
Vision: By 2020, eHealth is established as the bedrock of health system to achieve desired health outcomes in the SEA Region.

Mission: From 2014-2020 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.
Objective 2.1 - Improve organizational and technological infrastructure for eHealth.

Objective 2.3 - Advocate role of eHealth in achieving universal health coverage

Objective 2.3 - 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 2.4 - Promote the sustainable, scalable and interoperable development of eHealth-centered programs for health service delivery

Objective 2.5 - Encourage countries to utilize eHealth applications to strengthen their CRVS and set-up close collaborations with relevant local agencies to share vital statistics electronically.
Objective 3.1 – Promote intersectoral cooperation, both within each country and among member countries. This includes identification of electronic mechanisms for sharing best practices, regional resources, and lessons learned.

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.
Strategic Area 4: Human Resource Development

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.
Monitoring & Evaluation

- ICT Interventions for health sector are not all realizable in the short time and can be divided into three categories:
  - Build on what exists as immediate response
  - Extend what exists as medium-term response
  - Work for what requires future long-term planning

- M&E of the plan will be undertaken in alignment with WHO’s results-based management framework and M&E processes

- Progress reports will be issued at the end of each biennium.

- A mid-term evaluation will be conducted after the third year (end of 2016) of the implementation of the strategy

- With the end of the strategy period, end-term evaluation will be undertaken in 2020.
Group Work – Regional eHealth Strategy review

Strategic Area 1: Policy and Strategy
– Sri Lanka, Thailand

Strategic Area 2: Tools and Methods
– Bangladesh, DPRK, Myanmar

Strategic Area 3: Collaboration and Partnerships
- Nepal, Bhutan, UNSW

Strategic Area 4: Human Resource Development
- Indonesia, India, Maldives

Vision, Mission & Goal, Key principles, Overview of eHealth in SEAR: All groups
Call for collaboration on Electronic Cause of Death Integrated Reporting System (eCODIRS)

- Developing a Regional Strategy for SEAR to Strengthen Mortality Statistics using Routine Civil Registration systems in countries (Key Area of COIA)
“Universal Health Coverage is the single most powerful concept that public health has to offer”

“Universal coverage is the hallmark of a government’s commitment, its duty, to take care of its citizens, all of its citizens”

DG Acceptance Speech 23 May 2012
A simple definition of UHC

All people receive the health services they need without suffering financial hardship.
The Cube: Three dimensions (policy choices) of UHC

Towards universal coverage

Coverage mechanisms

Reduce cost sharing and fees

Include other services

Extend to non-covered

Financial protection: what do people have to pay out-of-pocket?

Services: which services are covered?

Population: who is covered?

Do we know our Universe!
We need to Reach the unreached - Big Gap

- 1 in 3 births are not registered
- 2 in 3 deaths are unregistered
- 85 countries, with 2/3rd of the world's population do not have reliable cause of death
Progress in obtaining COD from CRVS has been negligible: only increased from 5 to 9% in 25 yr

Quality of Global COD Data shows much improvement needed in Asia

Figure 1: Quality of globally available information about cause of death

Quality of causes of death
- High
- Medium-high
- Medium-low
- Low
- Limited use
- No report

"..... the consequences of inadequate systems for civil registration – that is, counting births and deaths and recording the cause of death..... Without these fundamental health data, we are working in the dark. We may also be shooting in the dark. Without these data, we have no reliable way of knowing whether interventions are working, and whether development aid is producing the desired health outcomes.”

Dr Margret Chan, Director-General, World Health Organization
12 November 2007
Civil Registration & Vital Statistics systems to be strengthened to get denominators right

Improving the quality and use of birth, death and cause-of-death information: guidance for a standards-based review of country practices
Based on Key Challenges around CRVS in SEAR - Top 5 Priorities in the strategic plan

1. Increasing coverage and completeness of birth and death registration and quality audits

2. Better Cause of Death data: For both Institutional and Community Deaths; Verbal Autopsy Pilot;

3. ICD-10 coding for cause-of-death data (MCCD to begin with)

4. Generation and Publication of Vital Statistics from civil registration

5. Establishing an Inter-agency National CRVS Steering Committee & other mechanisms to make all key stakeholders work together
Electronic COD Integrated Reporting System (eCODIRS): The Objectives

1. Improving quality & completeness of cause-of-death data:
   - For all deaths (incl community deaths): Verbal Autopsy.
   - For health facility deaths: MCCD & Intl. 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 CRS to filter duplication & fill gaps in CRS & linkage with National Population Registers
The Expected Outcome of Pilot & Scale-up of eCODIRS

In collaboration with the MOH, Civil Registration Office & NSO:

1. A Regional Strategy developed for improving mortality statistics using routine CRVS
2. Better quality mortality statistics: based on nationally representative COD data (facilities & community deaths)
3. All 5 components of CRVS system strengthening:
   - Legal basis and resources for civil registration
   - Registration practices, coverage and completeness
   - Death certification and cause-of-death
   - ICD mortality coding practices
   - Data access, use and quality check
4. Overall ICT infrastructure strengthening to support CRVS, HIS & Hospital Information Systems.
5. Better achievement of UHC
For Countries with common characteristics in CRVS, common strategic approaches can be adopted

Cluster 1: India & Indonesia - large populations
- SRS with VA & MCCD for facilities to get estimates for state/provinces

Cluster 2: Thailand, SriLanka, DPRK - high completeness, but quality issues
- Strengthen COD reporting with VA; periodic assessment of data quality, & apply findings to generate national and sub-national estimates.

Cluster 3: Bangladesh, Myanmar, Nepal - low completeness.
- SRS with VA or Sentinel surveillance, expand to complete coverage

Cluster 4: Bhutan, Maldives, Timor-Leste - small populations,
- VA & MCCD with complete coverage within a short period.
10 Components of eCODIRS – Huge EIC work required

1. Mobilize Community Health workers for Community Death Reporting
   - Verbal Autopsy Data collection methods (Mobile Phone, Fill and forward paper VA for data entry, Call center approach)

2. Medically Certified Cause-of-Death (MCCD) for Hospital Deaths

3. Incorporation of Police data for unnatural Deaths

4. Within 24 hrs Reporting of Maternal Deaths to MDSR

5. Birth Reporting by CHWs to the Central Unit

6. Establish a Cause of death Central Unit (call center+OpenMRS)

7. Coding of COD data
   - IRIS Coding of COD for Health Facility Deaths
   - INTER VA for coding COD from Verbal Autopsy for Community Deaths

8. Regular data Quality Assessment and Compilation of VS

9. Linkage with CRS to filter duplication and fill the gaps in CRS & linkage with National Population Registers

10. Campaign to reach-out to marginalized communities
• Reach the unreached
• Universal Health coverage measured accurately
  - what gets measured gets done
• Accurate visibility on Why people die?
  - Not shooting in the dark: better health comes
SEAR COIA Roadmaps include eCODIRS related actions

7 Key Areas to Strengthen:

1. Monitoring of Results
2. Civil Registration and Vital Statistics
3. Maternal Death Surveillance & Response (MDSR)
4. Resource Tracking & National Health Accounts
5. Innovation through the use of ICT (eHealth)
6. National Review and Accountability Mechanisms
7. Advocacy and Outreach
Civil Registration & Vital Statistics, and MDSR

**Indicator 1:** At least 75% of births registered
- 5 SEAR countries achieved: Bhutan, DPRK, Maldives, Sri Lanka and Thailand
- 4 countries between 50-75% completeness: India, Indonesia, Nepal, Timor Leste

**Indicator 2:** At least 60% of deaths registered
- 5 SEAR countries achieved > 60% completeness of death registration: Bhutan, DPRK, Maldives, Sri Lanka, Thailand

**Indicator 3:** At least 90% of maternal deaths notified

**Indicator 4:** CRVS Strategic plan approved by government
- 7 countries assessment completed, plans development underway: Indonesia, Maldives, Sri Lanka, Timor Leste, Bangladesh, Thailand, Nepal
- 3 ongoing in 2013-14: Myanmar, DPRK, Bhutan
- 1 countries pending: India, CIVIL REGISTRATION & VITAL STATISTICS, AND MDSR
Many more eHealth initiatives for COIA success ....
QUOTE:
We need to start looking at having a way of managing the whole ecosystem, because you can't pick away at it piece by piece, you have to truly start being coordinated & managing our resources as a system.

Ted Danson