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eHealth Standardization and Interoperability and related eHealth activities at WHO Headquarters

Dr Ramesh S. Krishnamurthy

Focal Point, eHealth Standardization and Interoperability
krishnamurthyr@who.int

International Telecommunication Union – Study Group 16
Joint IEEE, ITU and WHO session on e-Health – 29 October 2013 – Geneva, Switzerland

World Health Organization

Objectives

- To introduce e-health related activities of each organization and group

- To discuss further collaboration of each organization and group

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WHO's Organizational Structure
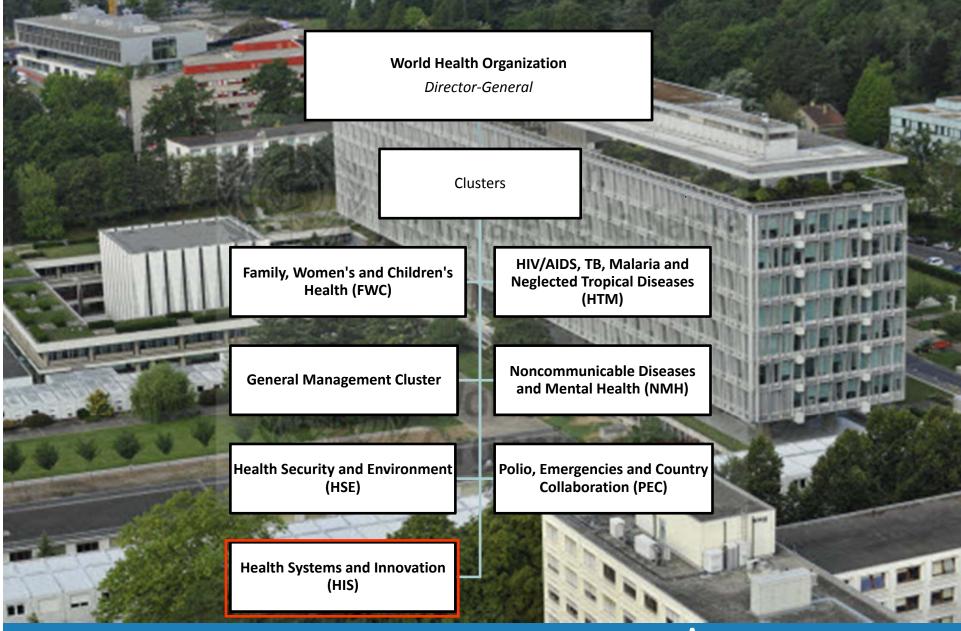
World Health Organization

Mission

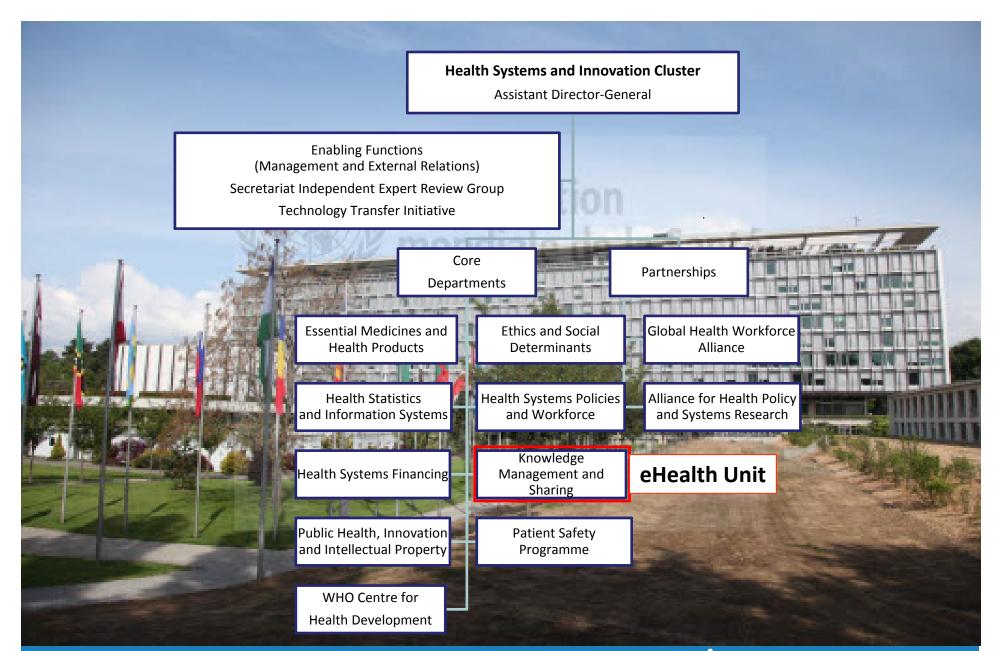WHO is the directing and coordinating authority for health within the United Nations system.

It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends

World Health Organization

World Health Organization

Director-General

Clusters

Family, Women's and Children's Health (FWC)

HIV/AIDS, TB, Malaria and Neglected Tropical Diseases (HTM)

General Management Cluster

Noncommunicable Diseases and Mental Health (NMH)

Health Security and Environment (HSE)

Polio, Emergencies and Country Collaboration (PEC)

Health Systems and Innovation (HIS)

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Health Systems and Innovation Cluster

Assistant Director-General

Enabling Functions
(Management and External Relations)

Secretariat Independent Expert Review Group

Technology Transfer Initiative

Core Departments

Partnerships

Essential Medicines and Health Products

Ethics and Social Determinants

Global Health Workforce Alliance

Health Statistics and Information Systems

Health Systems Policies and Workforce

Alliance for Health Policy and Systems Research

Health Systems Financing

Knowledge Management and Sharing

eHealth Unit

Public Health, Innovation and Intellectual Property

Patient Safety Programme

WHO Centre for Health Development

World Health Organization

eHealth
Standardization and Interoperability

World Health Organization

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.

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eHealth Milestones

WHA58.28

Recognized the value that ICT bring to health

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eHealth Milestones

WHA66.24

Recognized the value of adoption of standards for interoperability

and Health on the Internet

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Standardization and Interoperability

WHO Forum on Health Data Standardization and Interoperability

3–4 December 2012
Geneva, Switzerland

World Health Organization

- Facilitates the *Global Forum on eHealth Standardization and Interoperability*

- **Next Forum: February 2014** *Inter-Ministerial Policy Dialogue on 2nd WHO Forum on eHealth Standardization and Interoperability*

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Generalized Categories of Standards relevant to healthcare

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Generalized Categories of Standards

- ## Health Data Standards
  (Primary area of World Health Organization)

  o Data Standards, Information Content Standards, Information Exchange Standards, Entity/Person Identifiers Standards, Privacy and Security Standards

- ## Information Technology Standards
  (Primary area of International Telecommunications Union)

  o Telecommunication, Machine to Machine Communications, and other Technical Standards related to ICT

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Standards Relevant to Health Data

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Indicator-based Records

Individual/Patient Records

Lack of Reliable & Timely Data Exchange

Registries

Diagnostics/Images Records

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Standards Relevant to Health Data

- Data Standards

- Information Content Standards

- Information Exchange Standards

- Entity/Person Identifiers Standards

- Privacy and Security Standards

- (*Functional Standards; Business Requirements*)

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Data Standards

- Disease Classification

- Drugs Classification

- Laboratory Data Standards

- Digital Images

- Medicinal Products, Pharmaceutical Doses, Units, Common Terminology Services

Examples only
(non exhaustive list)

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Data Standards

- Clinical Procedure Terminology
- Pharmacy Terminology
- Nursing/HRH Terminology
- Payer Terminology
- Financial/Business Transactions Terminology
- Units of Measurements

Examples only
(non exhaustive list)

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Information Content Standards

- Healthcare Content
- Pubic Health Card
- Medical Device Communication

Examples only
(non exhaustive list)

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Information Exchange Standards

- Digital Images
- Pharmacy Business Transactions
- Country-specific Mandated Transactions Terminology
- Financial/Business Transactions Terminology

Examples only
(non exhaustive list)

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Entity/Person Identifier Standards

- Patient Identifier
- Provider Identifier
- Employer Identification Number
- Country Identifier
- Health (Insurance) Card Issuer Identifier

Examples only
(non exhaustive list)

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Privacy and Security Standards

- Anonymization and Pseudonymization Standards
- Security Standards
- Confidentiality Standards
- Patient Consent Standards
- Data Audit Trails

Examples only
(non exhaustive list)

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Standards Relevant to Information Technology

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Information Technology Standards

- Standard Generalized Markup Language (SGML)
  ISO 8879:1986
- HyperText Markup Language (HTML)
  ISO 8859-1
- Extensible Markup Language (XML)
- Simple Object Access Protocol (SOAP)
  ISO/IEC 40210:2011

Examples only
(non exhaustive list)

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Areas of current focus

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Organization

Areas of current focus

- Data interoperability within and between Electronic Health Records (EHRs)

- Data interoperability between
  - Devices to Device
  - Device to EHRs
  - Diagnostics platforms and EMRs

Source: Public Health Data Standards Consortium; http://www.phdsc.org/; Accessed: June 3, 2012

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Thank you

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