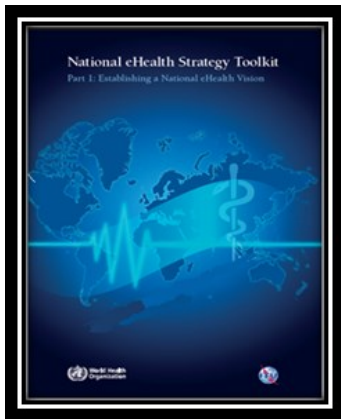
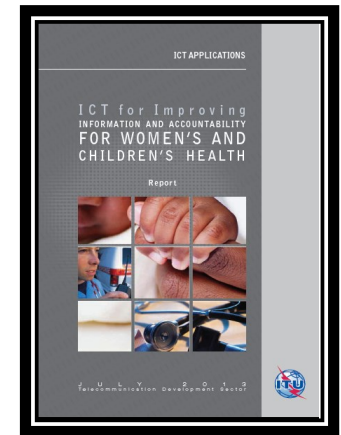


ICT for Improving Information and Accountability For Women's and Children's Health



**Bangkok, Thailand
30 September 2013**



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ICT Applications, ITU



Committed to connecting the world

Agenda

- ICT Development & Trends
- ICT/ Broadband and e-health
- ICT for Women & Children's Health
- Conclusions

ICT Developmental Trends

Why ICT is Important ?

ICT as enabler
for the
information &
Smart Society

.....



e-health



e-governance



e-education



e-commerce



Fully Networked
Car



Security in
Cyberspace



Smart
Grids



Digital
Cities

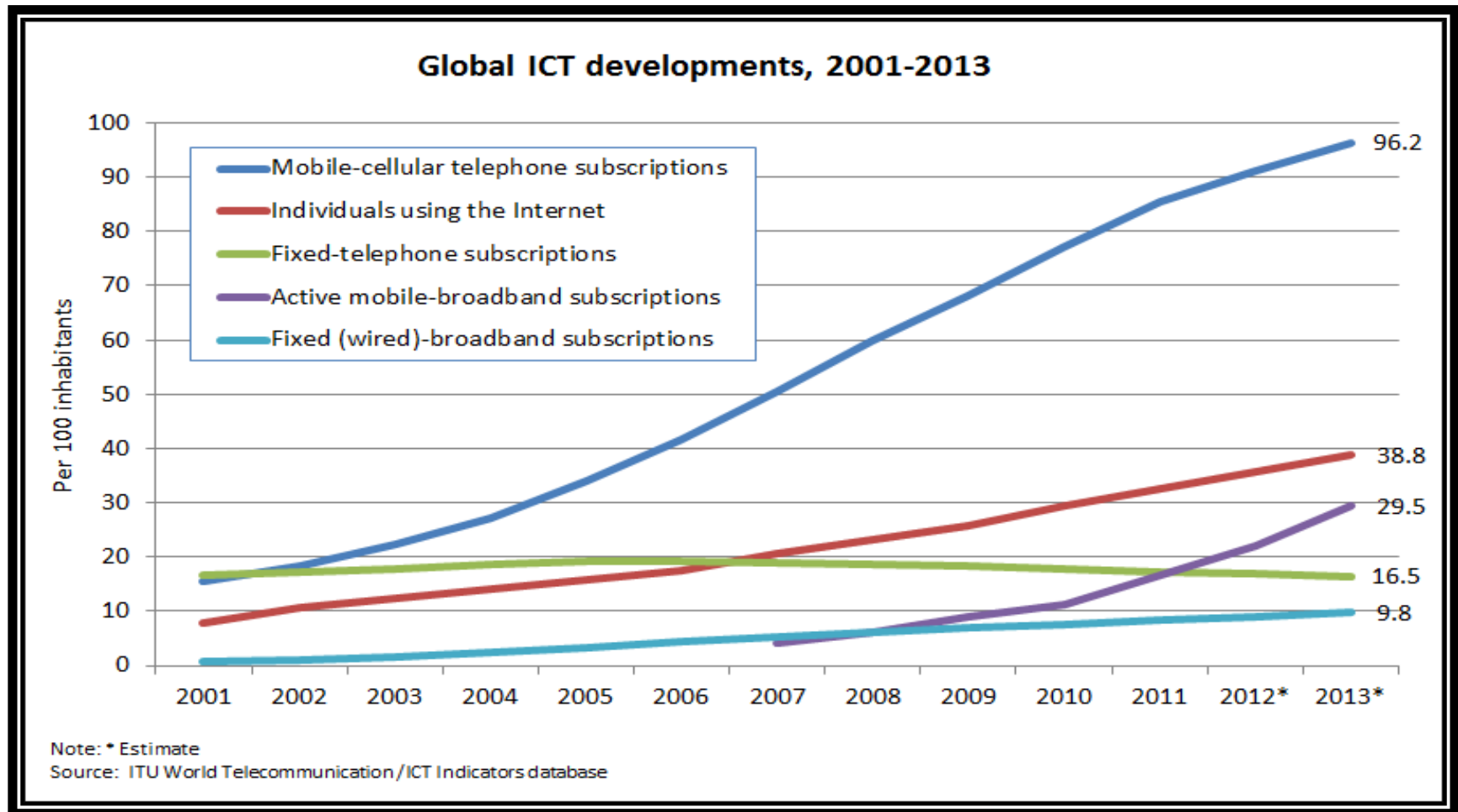


ICT and
climate change

C
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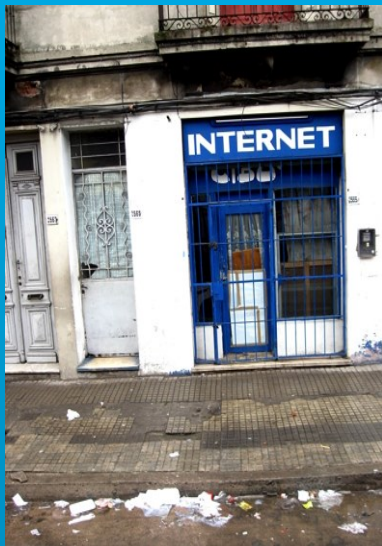


ICT Developments 2001-2013



67%

of people in Asia-Pacific
DON'T use the Internet



Only 7.6%

of households in Asia-Pacific
have fixed-line
broadband access

45%
annually

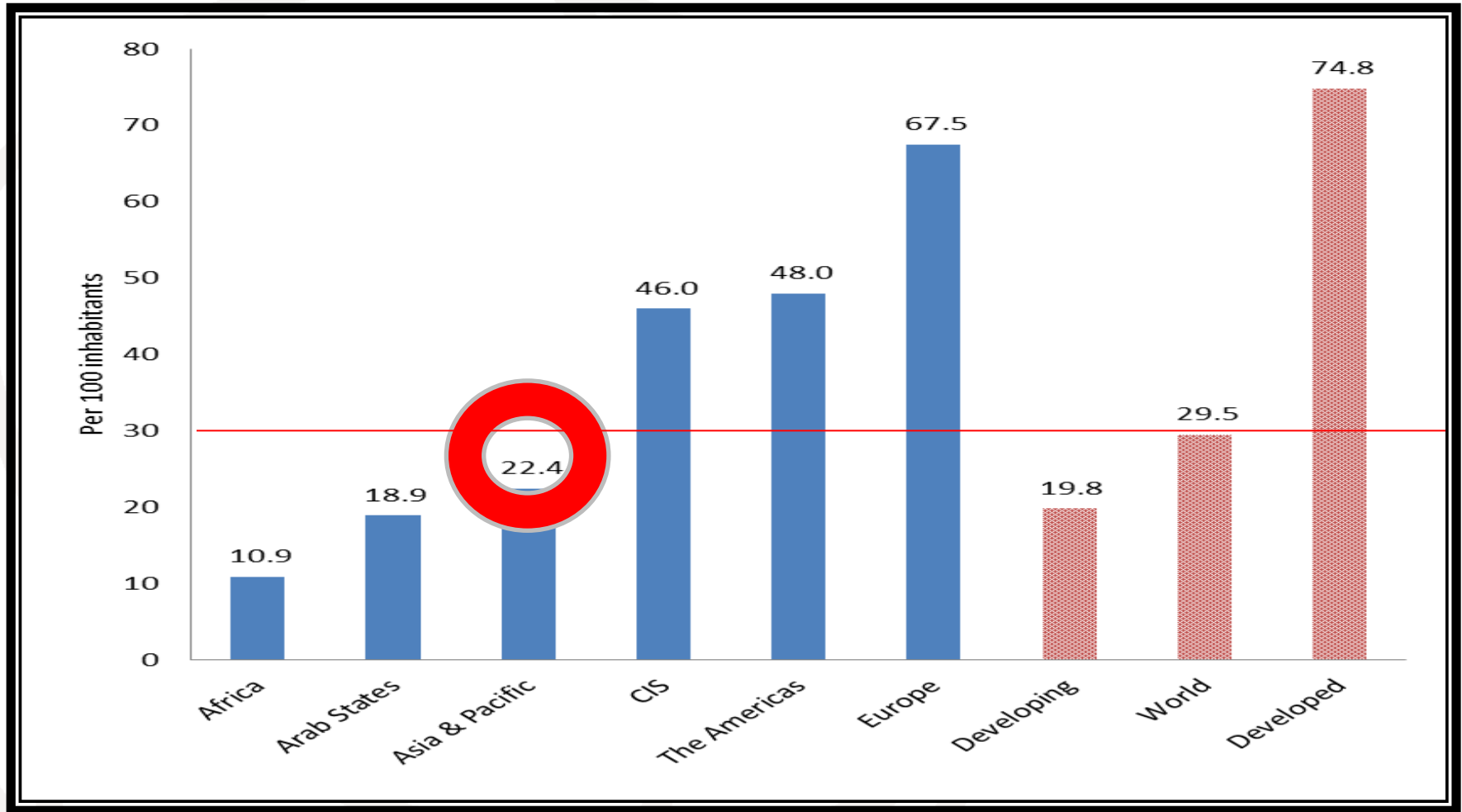
Mobile broadband has
grown
45% annually from
2010- 2013



22%

But mobile broadband
penetration at 22% is
below world average

Digital Gap in Asia-Pacific



**Active ICT/mobile-broadband
subscriptions, penetration (2013)**

Opportunity for Growth



More than 2 billion subscriptions worldwide by end 2013*

Americas

480 million subscriptions

48% penetration

28% CAGR (2010-2013)

Europe

422 million subscriptions

68% penetration

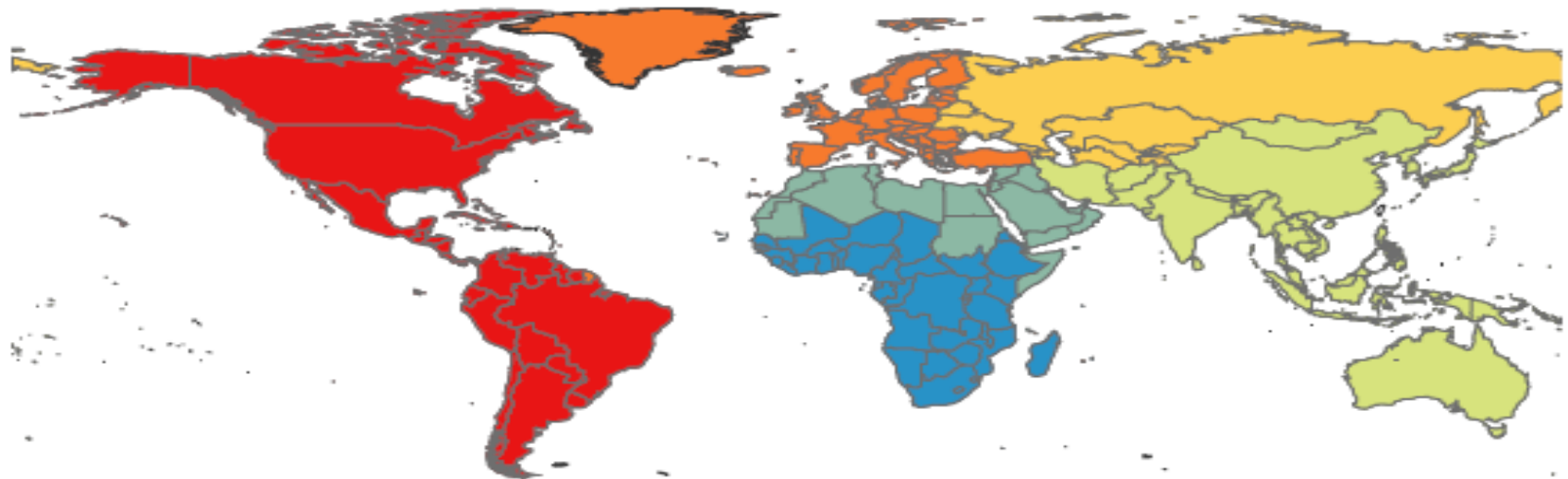
33% CAGR (2010-2013)

CIS

129 million subscriptions

46% penetration

27% CAGR (2010-2013)



Arab States

71 million subscriptions

19% penetration

55% CAGR (2010-2013)

Africa

93 million subscriptions

11% penetration

82% CAGR (2010-2013)

Asia-Pacific

895 million subscriptions

22% penetration

45% CAGR (2010-2013)

Source: ITU World Telecommunication (ICT) Indicators database

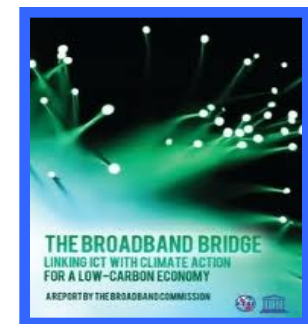
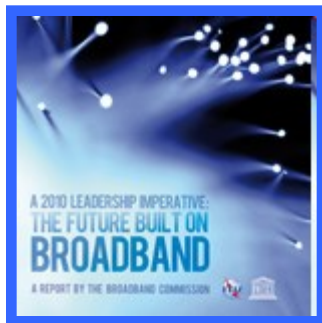
Note: † Estimate

ICT /Broadband & e-Health



“In the 21st century, affordable broadband access to the Internet is becoming as vital to social and economic development as networks like transport, water and power”

– Dr Hamadoun Touré, ITU Secretary-General



ICT for Achieving Millennium Development Goals



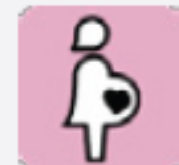
Environment



Gender Equality



End Poverty &
Hunger



Maternal health



Universal
Education



Child Health



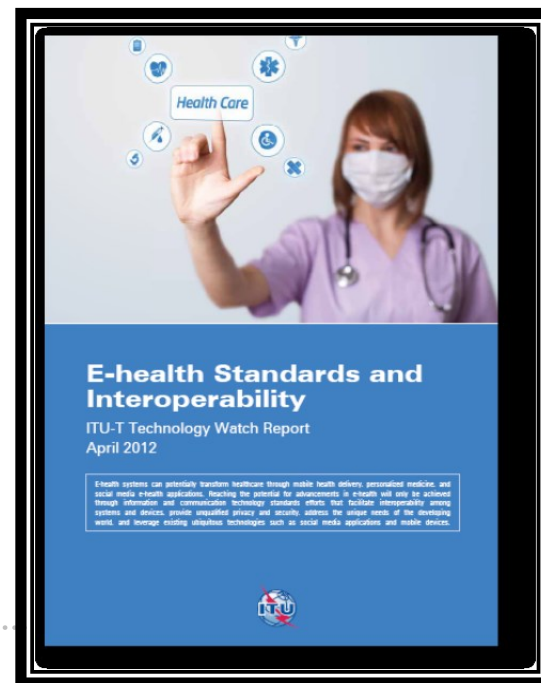
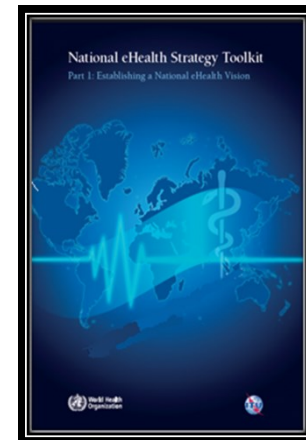
Partnership



HIV/AIDS

ITU Initiatives on Broadband : e-Health

- 6.8 billion mobile users, over 96 % coverage, 1/3rd of world population on Internet and 2 billion broadband users
- ITU WHO: Commission's on Information & Accountability for Women & Children's Health
- ITU WHOA “National e-Health Strategy toolkit”
- ITU WHO Mobile technologies prevention cure & awareness of NCD
- Interoperable standards on e-Health Study Group 16 : Q 28/16: “Multimedia Framework for e-health Applications.”
- Telemedicine / e Health: Nepal
- Mobile Applications : Nepal , Bhutan



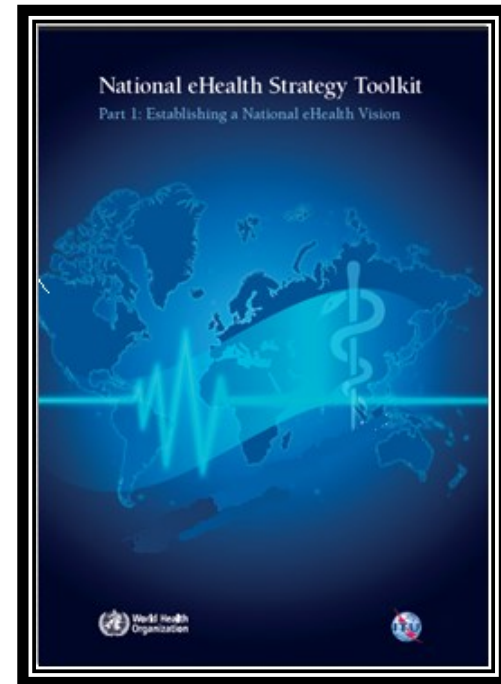
WHO-ITU Collaboration :

Facilitating National e-health Planning

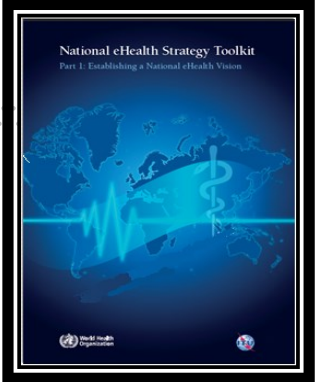
A “**National e-Health Strategy toolkit**” was Developed that consists of a methodology & set of resources to guide country decision makers to develop their national e-Health strategy and roadmap.

The toolkit published recently in 2012

The toolkit will be followed by rollout activities to disseminate it and to work with countries towards having a national approach to using ICT for Health.



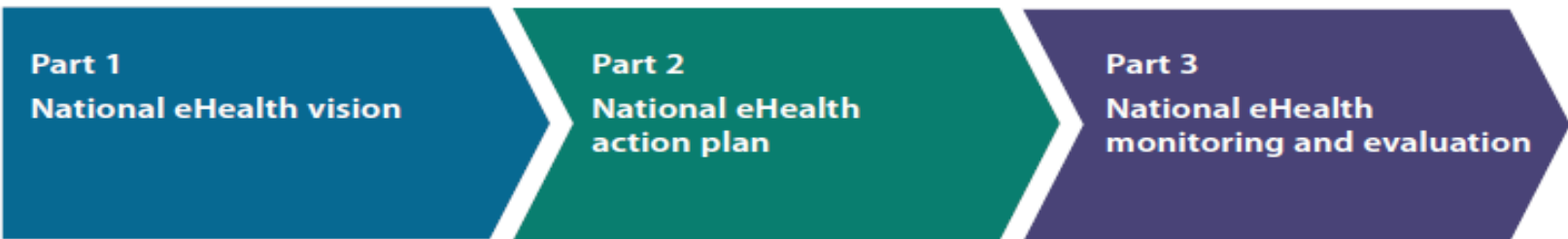
National eHealth Strategy Toolkit



The “**National eHealth Strategy Toolkit**” is a resource for developing or revitalizing a **country’s eHealth strategy**.

The Toolkit provides a **framework** and **method** for the development of a national eHealth vision, action plan and monitoring framework.

Toolkit for developing a National eHealth Strategy



- Engage with stakeholders
- Manage the process
- Establish the strategic context
- Learn from trends and experience
- Draft an initial vision
- Identify required components
- Gather information on the eHealth environment
- Assess opportunities and gaps
- Refine vision and develop recommendations

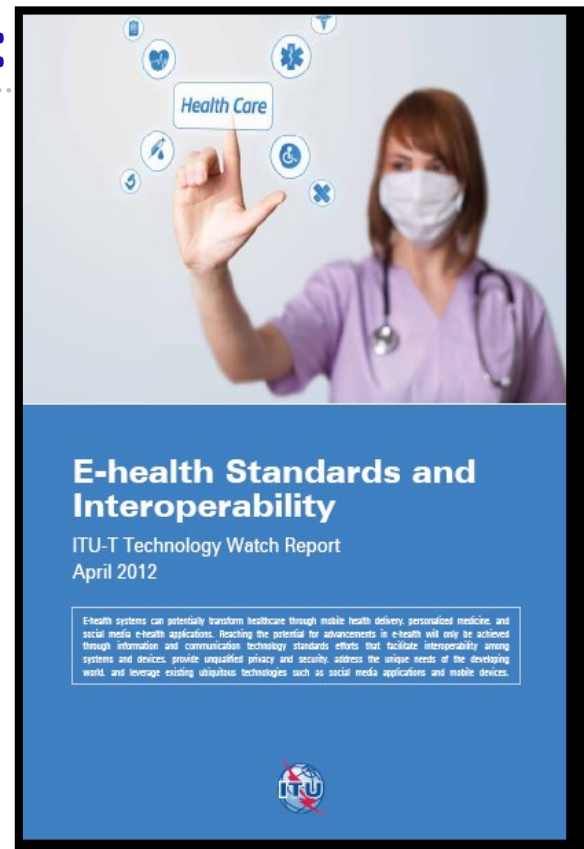
- Engage with stakeholders
- Manage the process
- Develop eHealth action lines
- Develop an integrated action plan
- Determine high-level resource requirements
- Apply funding constraints to refine plan
- Define implementation phases

- Define indicators for monitoring and evaluation
- Define baseline and target measures
- Define governance and process

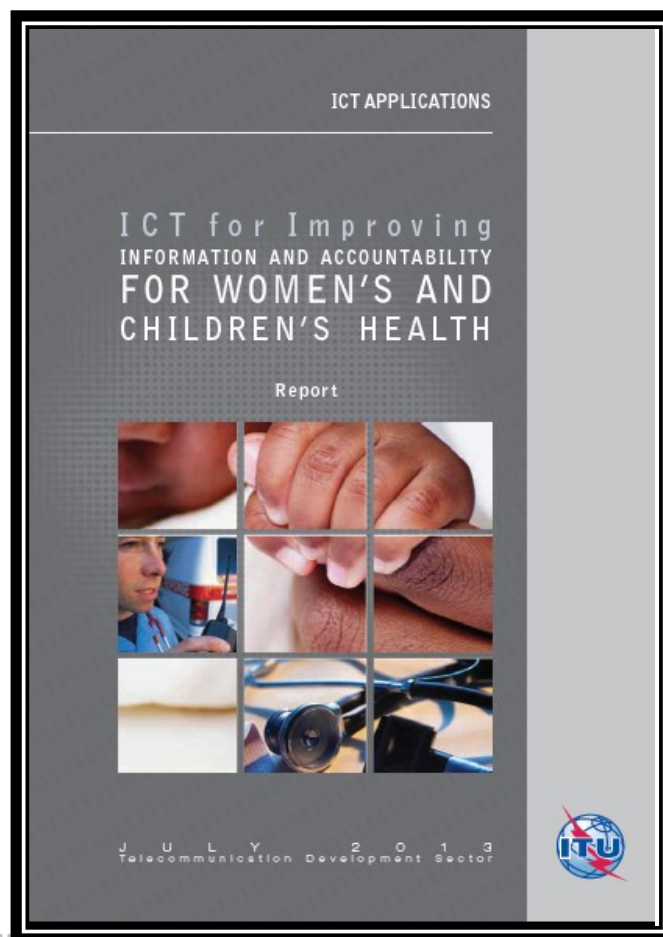
Available at: <http://www.itu.int/ITU-D/cyb/app/e-health.html>

ITU Facilitating e-health Standardization: e-Health Standards and Interoperability

- ITU's Standardization Sector has released a Technology Watch Report that looks to the E-Health Standards and Interoperability
- This report explains how rapid advancements in the development of e-health standards must accompany three trends in electronic healthcare in the coming decade:
- Advancements in healthcare delivery via **mobile and wireless e-health technologies**;
- Personalized medicine, including **personal health records, medical diagnostic devices, and biometric records**; and
- Interactive healthcare via **social media and Web 2.0 applications**.
- Provides an introduction to some of the institutions working to develop standards in the capacious area of e-health, including **CEN/TC 251, DICOM, HL7, ISO/TC 215, ISO/IEEE 11073** and, in particular, the work ITU-T is doing in e-health standards areas such as telecommunications and mobile infrastructure, multimedia e-health applications, and emergency and disaster response.
- The report is available: http://www.itu.int/dms_pub/itu-t/oth/23/01/T23010000170001PDFE.pdf



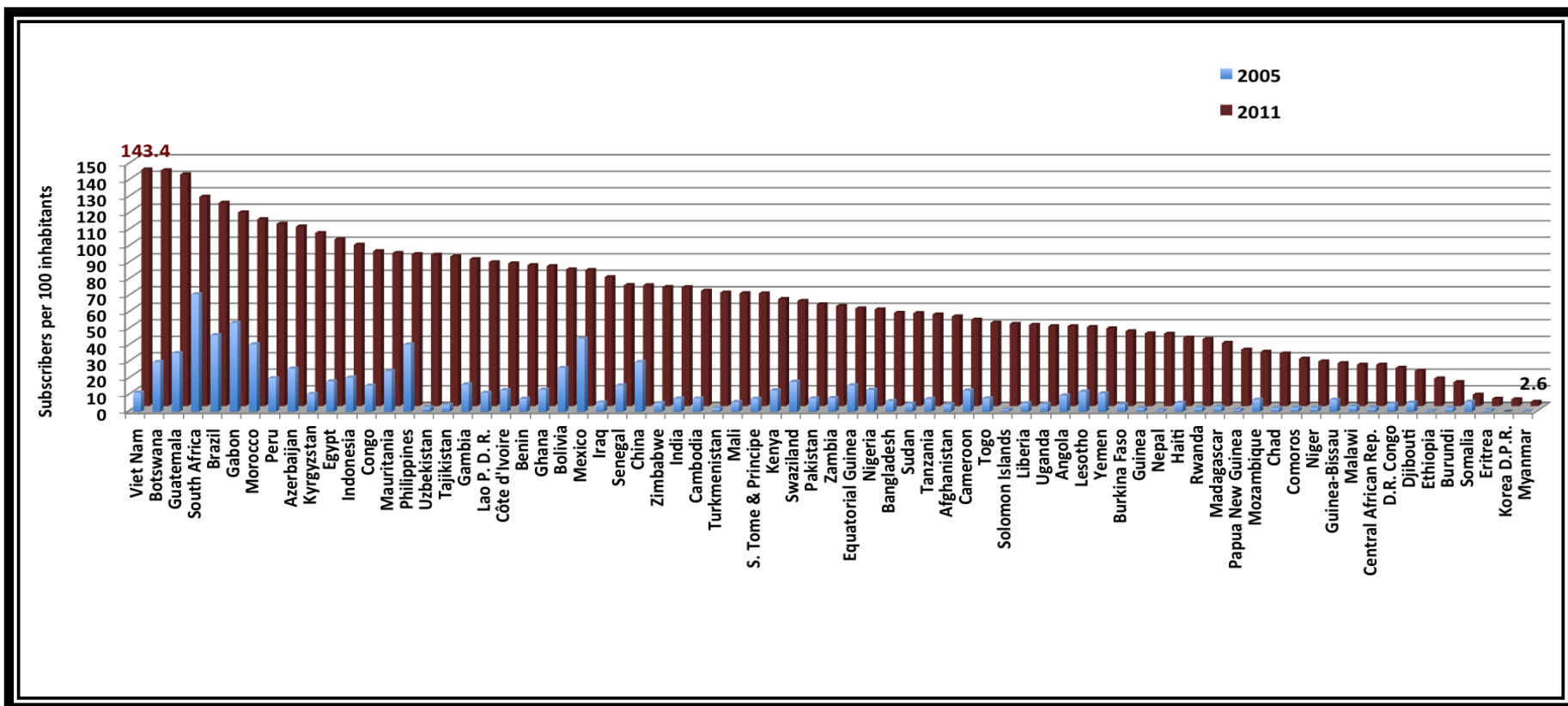
ICT for Women & Children's Health





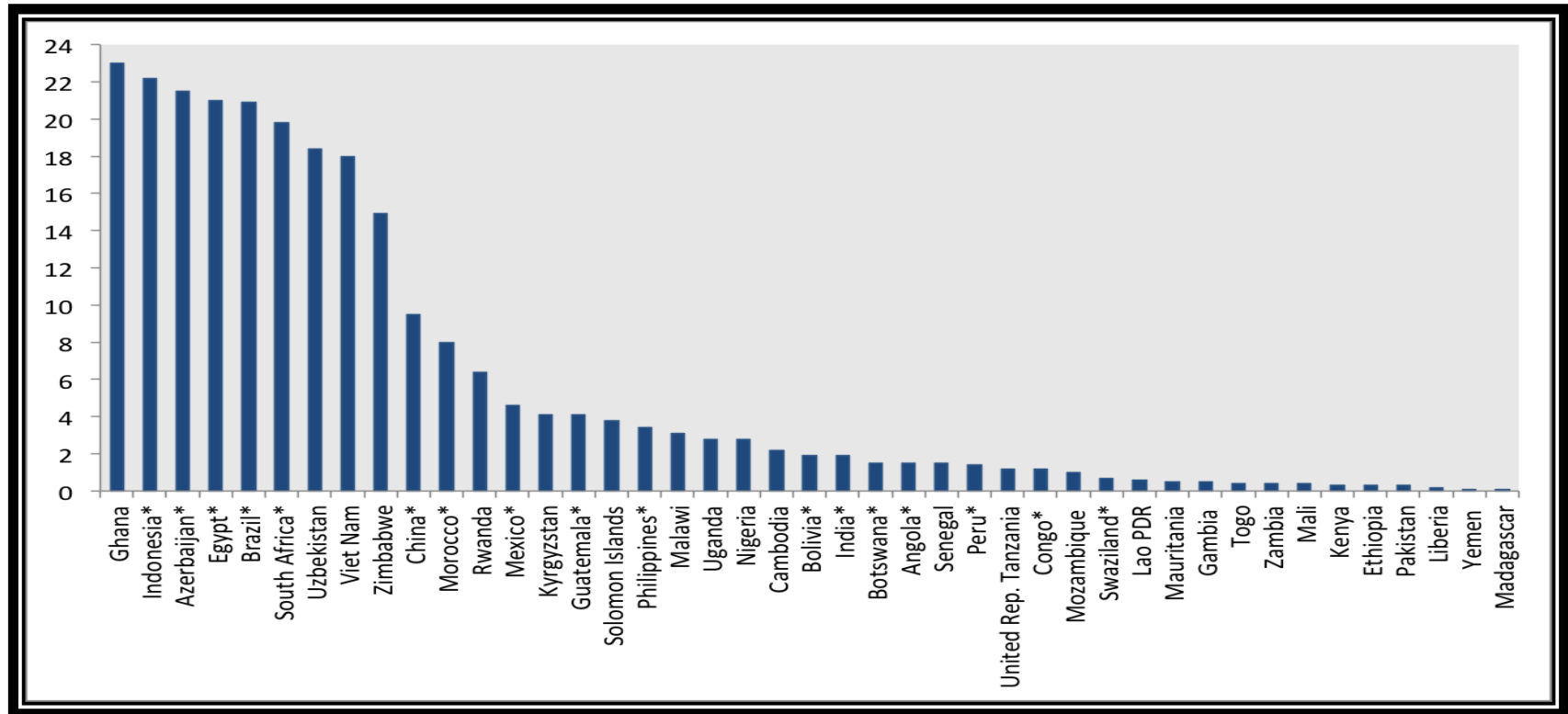
- The Commission on Information and Accountability for Women's and Children's Health (CoIA)– was established in January 2011 to increase the likelihood that pledges for women's and children's health are honoured and that resources are spent in the most effective way to save lives.
- Ten Recommendations are set by the CoIA aim at creating a system to track whether donations for women's and children's health are made on time, resources are spent wisely and transparently, and whether the desired results are achieved.

Mobile Cellular Subscriptions in CoIA Countries



- China & India has over 1 billion mobile subscriptions
- Viet Nam leads with a penetration of 143.4 mobile-cellular subscriptions
- In 49 CoIA countries (65%), the penetration of mobile-cellular subscriptions grew at annual rates of at least 30 per cent during the last six years.

Active Mobile Broadband Subscriptions in CoIA Countries



- Rural and remote communities, wireless technologies still represent the best and most affordable option for broadband services
- Mobile-broadband subscriptions have grown 45 % annually in last 4 years
- In Africa, the region to which most CoIA countries belong, mobile-broadband penetration has reached 4%
- 30 CoIA countries have reached penetration rates above 1%

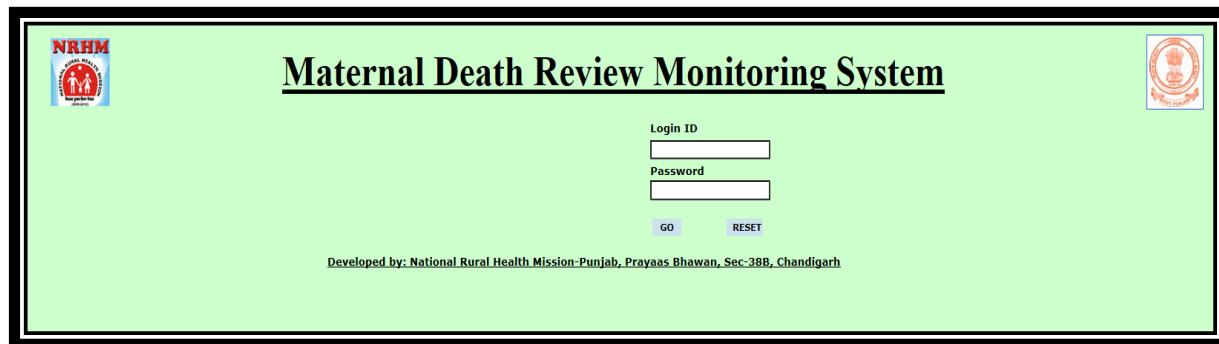


Recommendation 1: Civil Registration and Vital Statistics (CRVS) and Maternal Death Surveillance and Response (MDSR)

- Registration of vital events, such as deaths and births, are still mostly paper-based systems and the reporting of these records is often delayed.
- The use of electronic systems can contribute to drastically reduce such delays, providing near real-time reporting, in addition to improving data quality.

Examples:

- Liberia Ministry of Health and Social Welfare launched the **Universal Birth Registration (UBR)** system, the country's first decentralized electronic birth registration and certification system by using of mobile phones to collect birth registration information in rural areas, which is then transmitted to the main registration service.
- Punjab National Rural Health Mission has established an online **Maternal Death Review Monitoring System** to ensure that every death of mother and infant is recorded, so that the root cause and gaps in services are identified.



The screenshot shows the login interface for the Maternal Death Review Monitoring System. It features a light green background with a black border. In the top left corner is the NRHM logo, and in the top right corner is the Government of India emblem. The title "Maternal Death Review Monitoring System" is centered at the top in a bold, black, underlined font. Below the title, there are two input fields: "Login ID" and "Password". Below these fields are two buttons: "GO" and "RESET". At the bottom center, there is a small text line: "Developed by: National Rural Health Mission-Punjab, Prayaas Bhawan, Sec-38B, Chandigarh".

Recommendation 2: Health Indicators

- When it comes to data collection, web applications can allow health facilities to enter data directly into central servers, without the need for any software installation or database management at the local level.
- Electronic systems allow for the introduction of a range of data quality measures, and comparing related values, such as the total number of births to the number of live births.
- Data become immediately available at the district, provincial and national levels, facilitating timely decision-making and the provision of feedback.

Examples:

- **mTRAC** is an SMS-based reporting platform that enables health care workers (HCW) to send weekly government reports on disease surveillance, malaria case management, and stock quantities of antimalarial drugs, using mobile phones.
- Uganda adopted **DHIS2**, a web-based Health Information System (HIS) that aims at facilitating the management of HIS data, improving the reporting of individual facility aggregate information, and facilitating planning and delivery of quality health care nationwide.



Recommendation 3: eHealth and Innovation



Beneficiaries

- Public Health information and education
- Emergency toll-free telephone services
- eTracking and alert systems for expectant mothers and infants
- Remote patient monitoring
- eFinancial services



Healthcare community

- Telemedicine
- eLearning
- Point-of-care support
- Electronic patient records
- Community-based eHealthcare
- Online referral systems



Healthcare system

- eHealth data collection and reporting
- eRegistration of births, deaths, and cause of death
- eSurveillance
- Electronic supply chain management

- *By 2015, all countries have integrated the use of Information and Communication Technologies in their national health information systems and health infrastructure.*



A. eHealth services provided to individuals, new and expectant mothers, infants, their families and communities

| ICT innovations and services | Examples of what ICT services can offer along the Continuum of Care | | | | Examples of eHealth projects in CoIA countries ²² |
|--|---|--|--|--|--|
| | Pre-pregnancy | Pregnancy | Birth | Post-natal | |
| Public Health Information and Education <ul style="list-style-type: none"> • Call centres and helplines • Local radio • SMS/IVR-based health education and promotion • SMS and social networks for behaviour change and communication | <ul style="list-style-type: none"> • Access to reproductive health information • Reinforce positive health behaviour change, such as child spacing • Stimulate demand on reproductive healthcare | <ul style="list-style-type: none"> • Providing tips on appropriate care and general information on pregnancy • Support the prevention and treatment of mother-to-child transmission of HIV/AIDS and other communicable diseases • Peer support networks of pregnant women • Improving access and utilization of maternal health services by pregnant women | <ul style="list-style-type: none"> • Incentivizing women to attend facilities, providing skilled care during and after birth | <ul style="list-style-type: none"> • Access to information about infant and child nutrition, safe drinking water, hygiene promotion, etc. | <ul style="list-style-type: none"> • MAMA [2] • Medic Mobile [39] |
| Emergency toll-free telephone services | | | <ul style="list-style-type: none"> • Improve transportation of pregnant and newborn with complications • Access to skilled care at the time of birth in case of obstetric emergency care | | <ul style="list-style-type: none"> • HealthLine [31] |
| e-Tracking and alerts systems for expectant mothers and infants <ul style="list-style-type: none"> • Patient registration • Treatment compliance • Appointment reminders | | <ul style="list-style-type: none"> • Providing prenatal advice at every stage of gestation • Reminding pregnant women of pre-natal visits, informing nurses to follow-up | | <ul style="list-style-type: none"> • Infant registry for immunization • Reminders for mothers requiring post-natal care for themselves and for their infants • Alerts for infant vaccinations | <ul style="list-style-type: none"> • M-CHANJO [11] • MoTech [42] • UNICEF Reminder Mother System [53] |
| Electronic directories for health care providers <ul style="list-style-type: none"> • Hospitals and clinics database • Health professionals database | <ul style="list-style-type: none"> • Improve quick access to health services across the Continuum of Care | | | | <ul style="list-style-type: none"> • Hospitalsworldwide.com [33] • M4RH [37] |
| Remote patient monitoring | | <ul style="list-style-type: none"> • Detecting and monitoring warning signals and typical symptoms of high-risk pregnancies | | <ul style="list-style-type: none"> • Home care and treatment of newborn with complications | <ul style="list-style-type: none"> • Amanece [16] • Pesinet [44] |

| | | | | | |
|----------------------------|---|--|---|---|--|
| eFinancial services | <ul style="list-style-type: none"> Allowing women to save toward delivery and postnatal care | <ul style="list-style-type: none"> Payments for healthcare related to antenatal care, e.g. consultation, diagnosis, lab tests, etc. | <ul style="list-style-type: none"> Payments for healthcare related to birth, e.g. transportation and hospital care | <ul style="list-style-type: none"> Payments related to post-natal care, e.g. child immunizations | <ul style="list-style-type: none"> Health Systems 20/20 [32] Changamka Medical Smart Card [21] |
|----------------------------|---|--|---|---|--|

B. eHealth services provided to healthcare providers, health centres, health professionals, doctors, nurses and midwives, and Community Health Workers (CHW)

| ICT innovations and services | Examples of what ICT services can offer along the Continuum of Care | | | | Examples of eHealth projects in CoIA countries |
|---|--|---|--|--|---|
| | Pre-pregnancy | Pregnancy | Birth | Post-natal | |
| Telemedicine <ul style="list-style-type: none"> Audio-Video-conferencing Tele-ultrasonography, Tele-cardiology solutions, etc. Remote diagnostics | | <ul style="list-style-type: none"> Detecting and monitoring warning signals and typical symptoms of high-risk pregnancies Remote obstetrical ultrasound examination | <ul style="list-style-type: none"> Access to trained medical professionals in case of emergency | <ul style="list-style-type: none"> Screening/tests related to HIV, syphilis and other diseases Speeding up sending test results for early infant diagnosis | <ul style="list-style-type: none"> TulaSalud [52] RAFT [45] SMART [49] |
| eLearning <ul style="list-style-type: none"> Online training materials SMS quizzes SMS/MMS/IVR-based training | <ul style="list-style-type: none"> CHW training on reproductive health | <ul style="list-style-type: none"> CHW training on healthy pregnancy and delivery | <ul style="list-style-type: none"> Delivering education to traditional birth attendants | <ul style="list-style-type: none"> CHW training on newborn and early childhood care | <ul style="list-style-type: none"> AMREF [17] |
| Point-of-care support <ul style="list-style-type: none"> Decision support systems (e.g. checklists and algorithms) | | <ul style="list-style-type: none"> Screening for pregnancy risk factors Improve efficiency in diagnosis and treatment across the continuum of care through protocol-driven care | | <ul style="list-style-type: none"> Integrated management of childhood illness for children under 5 years old | <ul style="list-style-type: none"> e-IMCI using D-Tree [27] |
| Electronic patient records <ul style="list-style-type: none"> EHR, EMR, PHR | <ul style="list-style-type: none"> Allowing seamless integration of patient history data across the Continuum of Care | | | | <ul style="list-style-type: none"> RPMS Electronic Health Record [47] |
| Community-based eHealthcare | <ul style="list-style-type: none"> Collection of routine patient data during home and clinic visits to track health indicators at community level Case management Report and track expectant mothers and newborn health status and send alerts in case of abnormalities Management of workforce and performance monitoring and incentives Improve information flow back to the community level Improve the communication between and medical skills of health care institutions and birth attendants | | | | <ul style="list-style-type: none"> Childcount+ [9] CommCare [23] Medic Mobile [39] |
| Referral systems <ul style="list-style-type: none"> Closed calling network Online or SMS-based | | | <ul style="list-style-type: none"> Referrals and transportation of pregnant and newborn with complications to facilities with adequate resources Access to skilled care at the time of birth | | <ul style="list-style-type: none"> SHINE [48] EhealthPoint [26] |



C. eHealth services provided to healthcare managers and administrators to strengthen health systems

| ICT innovations and services | Examples of what ICT services can offer along the Continuum of Care | | | | Examples of eHealth projects in CoIA countries* |
|---|---|--|---|--|--|
| | Pre-pregnancy | Pregnancy | Birth | Post-natal | |
| Electronic health data collection and reporting <ul style="list-style-type: none"> Online Health Information System Structured SMS or mobile data collection forms | <ul style="list-style-type: none"> Collect, aggregate, and analyse health data related to demand for family planning | <ul style="list-style-type: none"> Collect, aggregate, and analyse health data related to HIV-ARV distribution to pregnant women, and antenatal care visits | <ul style="list-style-type: none"> Collect, aggregate, and analyse health data related to skilled attendance at birth, as well as to post natal care for mothers and babies 2 days after birth | <ul style="list-style-type: none"> Collect, aggregate, and analyse health data related to exclusive breast feeding, immunization, antibiotic treatment for childhood pneumonia, and stunting prevalence | <ul style="list-style-type: none"> Online Reporting of National Rural Health Mission, Punjab, India [13] |
| Electronic birth, death and cause of death registration | | | <ul style="list-style-type: none"> Birth, death and cause of death registration | | <ul style="list-style-type: none"> e-District Kapurthala, India [1] |
| e-Surveillance | | | <ul style="list-style-type: none"> Maternal and Infant death notification, review and surveillance | <ul style="list-style-type: none"> Maternal and child health surveillance related to meningitis, malaria, diarrhoea or nutrition | <ul style="list-style-type: none"> Online maternal death review system in Punjab, India http://pbnrh.org/login-mdr.aspx |
| Electronic Supply Chain Management | <ul style="list-style-type: none"> Stock management for reproductive health products | <ul style="list-style-type: none"> Stock management for life saving commodities²³ | <ul style="list-style-type: none"> Stock management for life saving commodities | <ul style="list-style-type: none"> Stock management for vaccines, pneumonia, diarrheal drugs, etc. | <ul style="list-style-type: none"> SMS for Life [50] |

Source: ITU, ICT for improving information and accountability for Women and Children Health, 2013, p. 22



mHealth for Women's and Children's Health

mHealth Alliance Active Grantee Projects (2012 – 2014)

mHealth projects grantees

| | |
|---|---|
| Cell-Life – MAMA, South Africa | Cell-Life uses the MAMA SMS service to reach mothers with information on HIV testing, healthy pregnancy and infant care, and provides mothers with access to the National AIDS Helpline. |
| Clinton Health Access Initiative (CHAI) – SMART, Nigeria | CHAI, the Federal Ministry of Health (FMOH) of Nigeria and Hewlett Packard have partnered on the SMS Printers to Accelerate Return of Test Results for Early Infant Diagnosis of HIV/AIDS program (SMART), which reduces turnaround time of test results by approximately 15 days. |
| Dimagi – CommCare, India | Dimagi's open source mobile maternal and child health case management tool is being deployed to deliver health information and services across five provinces in India. To support scale up, Dimagi is launching the Active Data Management tool to strategically use the data collected for decision-making. |
| D-Tree International – mNUT, Zanzibar | Alongside UNICEF and the Government of Zanzibar, D-Tree International provides rural health workers with a mobile phone-based decision support application, which gives them tools to identify, treat and care for children with severe acute malnutrition. |

mHealth for Women's and Children's Health

mHealth Alliance Active Grantee Projects (2012 – 2014)

| | |
|--|---|
| Grameen Foundation – MOTECH, Ghana | <p>The Grameen Foundation, in partnership with the Ghana Health Service, supports poor, rural women and Community Health Nurses by delivering time-specific information to women about pregnancy, childcare practices and appointments, while supporting electronic records systems for nurses. Grameen has formed a public-private partnership with MTN Ghana to sustainably expand access to these services.</p> |
| IRD – Interactive Alerts for Vaccine Coverage, Pakistan | <p>Interactive Research and Development (IRD) is using Interactive Alerts, an electronic vaccine registry, to increase coverage of vaccines in support of Pakistan's Expanded Program on Immunization. Interactive Alerts provides SMS reminders to patients and caregivers, radio-frequency identification tag stickers for immunization cards.</p> |
| MoH Rwanda RapidSMS and mUbuzima, Rwanda | <p>The Ministry of Health of Rwanda is training community health workers to use mHealth applications to monitor and promote maternal and neonatal health, identify potential risks, and promote antenatal care at health facilities. The mHealth applications in use are "RapidSMS," which helps track pregnant women, and mUbuzima, which is used to collect and report MDG indicators at the community level.</p> |
| Novartis – SMS for Life, Cameroon, Tanzania, Ghana | <p>Novartis has developed the SMS for Life initiative, which tracks weekly stock levels to reduce stock-outs of key anti-malarial medicines and is being scaled to reach all health facilities in Cameroon and Tanzania. In Ghana, SMS for Life is used to reduce mortality in childbirth by bringing real-time visibility to blood supplies in all hospitals in Ghana.</p> |

mHealth for Women's and Children's Health

Tools and platforms to accelerate innovation

CommCare

CommCare is an easily customizable mobile health (mHealth) platform that allows community health workers (CHW) track and support their interactions with patients.

The CHW registers patients using customized electronic forms that are used by low-literate CHWs in multiple languages. CommCare automatically submits visit data in 'real-time' to a central cloud server. Data on this server is privacy-protected, backed up, and accessible to supervisors and program managers around the world.

CommCare improves the quality of and access to care through client lists on the CHWs' phones, checklists for CHWs, SMS reminders when visits are due. It also boosts the accountability of care by facilitating real-time monitoring of CHWs' activities.

Source: <http://www.commcarehq.org/home/>

| Username | 2011-08-09 | 2011-08-10 | 2011-08-11 | 2011-08-12 | 2011-08-13 | 2011-08-14 | 2011-08-15 | 2011-08-16 | 2011-08-17 |
|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| agnesi | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| aisha | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| amelia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| benadeta | 0 | 6 | 0 | 10 | 0 | 0 | 0 | 10 | 0 |
| bulu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| catty | 0 | 0 | 17 | 6 | 0 | 0 | 0 | 0 | 0 |
| chipegwa | 0 | 0 | 10 | 10 | 0 | 0 | 0 | 0 | 4 |
| deb | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| demonick | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



mHealth for Women's and Children's Health

Tools and platforms to accelerate innovation

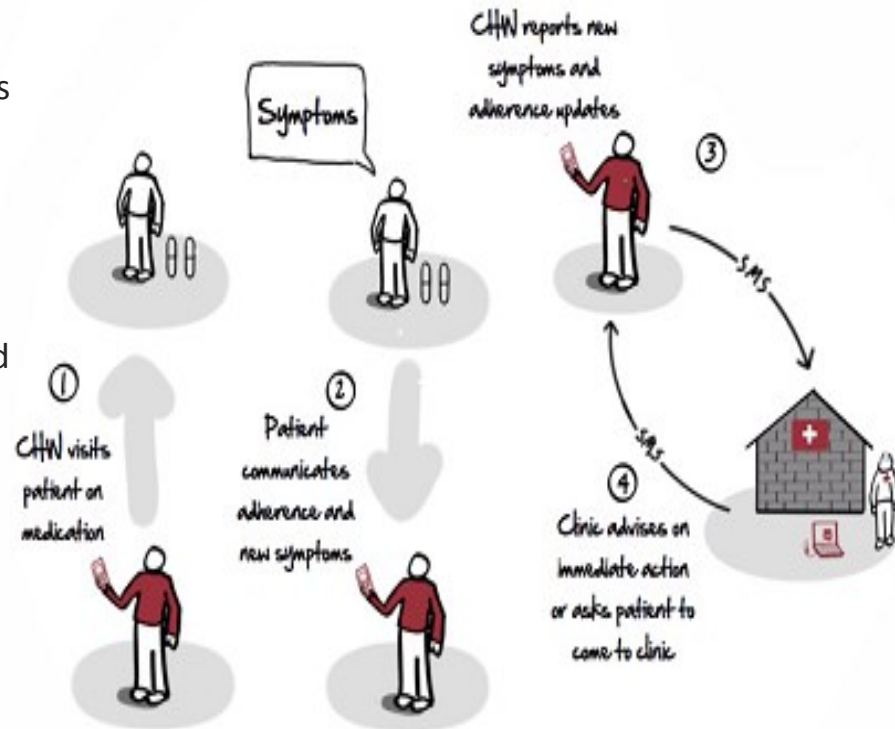
Symptom Monitoring

Medic Mobile

Medic Mobile has developed diverse low-cost tools that take advantage of SMS, email, SIM, J2ME or Android applications, as well as hosted and distributed web applications to coordinate community health workers and facility providers in remote villages. The goal is boosting the quality of maternal and neonatal health care by increasing referrals for skilled birth attendance and/or facility delivery, improving danger sign monitoring, and increasing coverage of complete antenatal and postnatal visits.

Through its SMS gateway, this web application receives and parses structured SMS messages, and stores them in a local database.

Source: <http://medicmobile.org/tools/> ;



Examples of Regulatory and Policy considerations

| Component | Description | Examples |
|--------------------------------|--|---|
| Legislation | National legislation, policy and regulatory components that govern how health information is stored, accessed and shared across geographical and health-sector boundaries. | <ul style="list-style-type: none"> • Unique health identifier regimes • Privacy, protection, storage and retention of personal health information • Consumer protection including in the online environment • Access and consent to personal health information use and disclosure, including secondary use • Audit and complaint procedures (e.g. such as those required for suspected breaches of privacy) • Licensing regimes which may be needed to ensure that private operators of components of a national eHealth environment meet required standards for privacy, integrity and security |
| Policy | Broader public policy required to support the development of a national eHealth environment. | <ul style="list-style-type: none"> • Health sector policy (e.g. reform, improved access to and use of health information) • Non-health sector policy (e.g. broader industry and economic development, utilization of existing eGovernment infrastructure) • Policies to stimulate and manage innovation, risk, evaluation of feasibility and utility of services |
| eHealth-specific policy | Policies specifically governing eHealth services, including privacy of health-related data held in digitized format, its use and sharing for research and the public interest. | <ul style="list-style-type: none"> • Policies on medical jurisdiction, liability for eHealth services (e.g. telemedicine), safety, data integrity and quality of care • Policies for reimbursement for eHealth services (e.g. telemedicine), both public and private • Policies for managing Internet health information quality, sales of medicines and regulated health products • Policies to demonstrate eHealth outcomes and clinical effectiveness |
| Compliance | Components required to support the development of eHealth products and which are compatible with the national eHealth environment. | <ul style="list-style-type: none"> • Development of national eHealth standards and other interoperability requirements • Compliance, conformance and accreditation of eHealth products and services |

Source: ITU – WHO National eHealth Strategy Toolkit



Standardization considerations

Examples of standards applied to ICT-based interventions to measure CoIA-related RMNCH indicators at the community or facility levels

| Example of ICT-Innovation Intervention | Type of Data or Indicators Collected and Transmitted | Examples of Relevant Standards |
|---|---|---|
| mHealth/eHealth Service: Notification System for Maternal Deaths | Deaths during pregnancy, childbirth and puerperium | Health Level Seven (HL7) Version 2.x and Version 3 for vocabulary; International Classification of Diseases (ICD10/ICD) for diagnosis |
| eHealth Service: Facility Data and Discharge Data Management | Cesarean delivery | Health Level Seven (HL7) Version 2.x and Version 3 for vocabulary; International Classification of Diseases (ICD10/ICD) for diagnosis |
| eHealth Services: Facility Stocks Management Information Systems | Management of essential medicines and medical products available for mothers and children at care facilities such as antiretroviral prophylaxis, uterotonic agents, DPT vaccine, antibiotic treatment for pneumonia, and contraception; Rapid diagnostic test for malaria, Vitamin A; oral rehydration package, Insecticide Treated Bednets | Biomedicine, Healthcare, Drug Standards ex. UMLS RxNorm; Unified Code for Units of Measure (UCUM); Uniform Facility Codes and related Facility Registry elements; ISO/TC 215 Standards List |

Source: WHO



Conclusions

- Accelerate the rate of mobile-cellular and broadband infrastructure deployment in CoIA countries
 - Facilitate access to mobile-cellular and broadband services among low-income and rural Populations
 - Develop and adopt national eHealth policies & strategies
 - Ensure the inclusion of an mHealth component in eHealth policies and strategies
 - Encourage the harmonization of eHealth standards
 - Take security concerns into consideration
 - Improve measurement of impact of eHealth applications and services, particularly at the community level
 - Target financial resources specifically for eHealth services
 - Develop human capacity in eHealth
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Quote from Director BDT, ITU

- No woman should pass away when giving birth because the right information did not get to her on time, when we have the ICT available.



- All children, regardless of their place of birth and the socioeconomic situation of their parents, should have access to proper healthcare and education because information technology is at our fingertips.

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