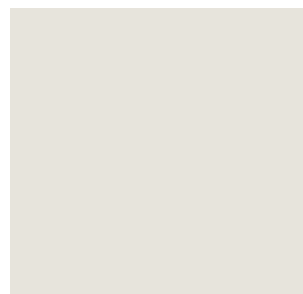# Atlas of eHealth Country Profiles

eHealth and innovation in women's and children's health

Based on the findings of the 2013 survey of CoIA countries by the WHO Global Observatory for eHealth

2013

World Health Organization

Contents

Acknowledgements

A guide to the country profiles

Background

This Atlas presents data collected on 64 of 75 United Nations Commission on Information and Accountability (CoIA) countries. The Commission developed an accountability framework with three interconnected processes – monitoring, reviewing and action. It focused specifically on these 75 countries as together they have 98% of the world's maternal and child mortality. The survey was undertaken by the WHO Global Observatory for eHealth between June and October 2013 and represents the most current information on the use of eHealth for women and children in these countries.

The objective of the country profiles is to describe the current status of the use of ICT for women's and children's health in CoIA countries. The country survey tools may be downloaded from the following web site: http://www.who.int/goe. All country profiles can be accessed at the same URL.

Methodological considerations

A total of 64 CoIA countries, representing 85% response rate, completed the survey. This is the highest response rate for any GOe survey to date. The survey responses were based on self-reporting by a selected group of eHealth and women's and children's health experts for each participating country. While survey responses were checked for consistency and accuracy, it was not possible to verify all responses to every question. The scope of the survey was broad; survey questions covered diverse areas of eHealth, from electronic information systems to record births and deaths and causes of death, to policy issues and legal frameworks. While every effort was made to select the best national experts to complete the instrument, it was not possible to determine whether they had the collective eHealth and women's and children's health knowledge to answer each question.

Quality assurance

Country profiles are intended to provide a 'snapshot' of the status of eHealth for women's and children's health in CoIA countries according to selected indicators. The Global Observatory for eHealth implemented a range of measures to assure their quality. The questionnaires received from participating countries were reviewed for completeness. External sources of information were used for validation of the data and to resolve inconsistencies. Data were reviewed before entry and after layout for publication.

Presentation of secondary data

The following indicators were selected for each country to complement the country profile information. Indicators and their sources are included below.

1. **Population in thousands (per 100 000 population).** World Population Prospects. New York, United States, United Nations Population Division, 2012: http://esa.un.org/wpp/sources/country.aspx.

2. **Gross national income (GNI) per capita (international $).** PPP int. $ = Purchasing Power Parity at international dollar rate (2013). World Development Indicators Database, 2013. Washington, DC, World Bank, 2013: http://data.worldbank.org.

3. **Physician density (per 1 000 population).** WHO World Health Statistics. Geneva, Switzerland, World Health Organization, 2009: http://www.who.int/whosis/whostat/EN_WHS09_Table6.pdf.

4. **Nurse and midwife density (per 10 000 population).** WHO World Health Statistics. Geneva, Switzerland, World Health Organization, 2009: http://www.who.int/whosis/whostat/EN_WHS09_Table6.pdf.

5. **Hospital bed density (per 10 000 population).**

    EURO Region: European Health for All Database (HFA-DB). Copenhagen, Denmark, WHO Regional Office for Europe, 2013: .

    WPRO Region: Western Pacific Region Countries and Areas. Manila, Philippines, WHO Regional Office for Western Pacific, 2014: http://www.wpro.who.int/countries/en.

    SEARO Region: South-East Asia Region Countries. New Delhi, India, WHO Regional Office for South-East Asia, 2014: http://www.searo.who.int/countries/en.

    PAHO Region: Pan-American Health Organization Regional Core Health Data Initiative. WHO Region for Pan-America, 2013: http://www1.paho.org/English/SHA/coredata/tabulator/newTabulator.htm.

6. **Life expectancy at birth (years).** WHO Mortality Database. Geneva, Switzerland, World Health Organization, 2012: http://apps.who.int/healthinfo/statistics/mortality/whodpms.

7. **Total health expenditure (%GDP).** World Health Statistics. Geneva, Switzerland, World Health Organization, 2010: http://www.who.int/whosis/whostat/2010/en.

8. **ICT Development Index Rank.** Measuring the Information Society. Geneva, Switzerland, International Telecommunication Union, 2012: http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2012/MIS2012_without_Annex_4.pdf.

9. **Mobile-cellular subscriptions (% inhabitants).** ICT-Eye: Key ICT Data and Statistics. Geneva, Switzerland, International Telecommunication Union, 2014: http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx.

10. **Internet users (% of individuals).** ICT-Eye: Key ICT Data and Statistics. Geneva, Switzerland, International Telecommunication Union, 2014: http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx.

11. **Maternal mortality ratio (per 100 000 live births).** Trends in maternal mortality: 1990 to 2010 – WHO, UNICEF, UNFPA and The World Bank estimates. Geneva, Switzerland, World Health Organization, 2012: http://whqlibdoc.who.int/publications/2012/9789241503631_eng.pdf?ua=1.

12. **Infant mortality rate (probability of dying between birth and age 1 per 1000 live births).** World Population Prospects. New York, United States, United Nations Population Division, 2012: http://esa.un.org/wpp/sources/country.aspx.

Afghanistan

Country indicators*		
Population (000s)	29,825	
GNI per capita (PPP Int $)	1,560	
Physician density (per 10 000 population)	0.19	
Nurse and midwife density (per 10 000 population)	0.07	
Hospital bed density (per 10 000 population)	4	
Life expectancy at birth (years)	60	
Total health expenditure (%GDP)	9.6
ICT Development Index rank	
Mobile-cellular subscriptions (% inhabitants)	60.35
Internet users (% of individuals)	5.5
Maternal mortality ratio (per 100 000 live births)	460
Infant mortality rate (per 100 000 live births)	36 [25-51]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes		Paper
Under 5 child mortality with the proportion of newborn deaths	Yes		Paper
Children under 5 who are stunted	Yes		Paper
Met need for contraception	No		Paper**
Antenatal care coverage	Yes		Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes		
Skilled attendant at birth	No		Both**
Postnatal care for mothers and babies	Yes		Both
Exclusive breastfeeding for six months	Yes		Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes		Paper
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Afghanistan

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

http://www.who.int/goe

Angola

Country indicators*			
Population (000s)	20,821	Total health expenditure (%GDP)	3.5
GNI per capita (PPP Int $)	5,400	ICT Development Index rank	139
Physician density (per 10 000 population)	0.17	Mobile-cellular subscriptions (% inhabitants)	48.61
Nurse and midwife density (per 10 000 population)	1.66	Internet users (% of individuals)	16.9
Hospital bed density (per 10 000 population)	8	Maternal mortality ratio (per 100 000 live births)	1,400
Life expectancy at birth (years)	51	Infant mortality rate (per 100 000 live births)	45 [26-76]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio			
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes	Every year	Paper
Met need for contraception	Yes	Every year	Paper
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Angola

Azerbaijan

Country indicators*				
Population (000s)	9,309	Total health expenditure (%GDP)	5.2
GNI per capita (PPP Int $)	9,310	ICT Development Index rank	61
Physician density (per 10 000 population)	3.38	Mobile-cellular subscriptions (% inhabitants)	108.77
Nurse and midwife density (per 10 000 population)	6.84	Internet users (% of individuals)	54.2
Hospital bed density (per 10 000 population)	75	Maternal mortality ratio (per 100 000 live births)	43
Life expectancy at birth (years)	71	Infant mortality rate (per 100 000 live births)	15 [9-25]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2003
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2001
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	Yes

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines, Education programs - for consumers and professionals, Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Yes
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Azerbaijan

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Bangladesh

Country indicators*				
Population (000s)	155,000	Total health expenditure (%GDP)	3.7
GNI per capita (PPP Int $)	2,030	ICT Development Index rank	135
Physician density (per 10 000 population)	0.36	Mobile-cellular subscriptions (% inhabitants)	63.76
Nurse and midwife density (per 10 000 population)	0.22	Internet users (% of individuals)	6.3
Hospital bed density (per 10 000 population)	3	Maternal mortality ratio (per 100 000 live births)	240
Life expectancy at birth (years)	70	Infant mortality rate (per 100 000 live births)	24 [20-31]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2009
Implementation status	Yes
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	Paper
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 2 years	Paper
Children under 5 who are stunted	Yes	Every 2 years	Paper
Met need for contraception	Yes	Every 2 years	Paper
Antenatal care coverage	Yes	Every 2 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every 2 years	Paper
Postnatal care for mothers and babies	Yes	Every 2 years	Paper
Exclusive breastfeeding for six months	Yes	Every 2 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every 2 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Public-private partnerships, Other sources

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	Yes

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Bangladesh

Bolivia (Plurinational State of)

Country indicators*

Population (000s)	10,496	Total health expenditure (%GDP)	4.9
GNI per capita (PPP Int $)	4,880	ICT Development Index rank	99
Physician density (per 10 000 population)	1.22	Mobile-cellular subscriptions (% inhabitants)	90.44
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	34.2
Hospital bed density (per 10 000 population)	11	Maternal mortality ratio (per 100 000 live births)	190
Life expectancy at birth (years)	67	Infant mortality rate (per 100 000 live births)	19 [13-28]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	Yes

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	No
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Bolivia (Plurinational State of)

Botswana

Population (000s)	2,004	Total health expenditure (%GDP)	5.1
GNI per capita (PPP Int $)	16,060	ICT Development Index rank	108
Physician density (per 10 000 population)	0.34	Mobile-cellular subscriptions (% inhabitants)	153.79
Nurse and midwife density (per 10 000 population)	2.84	Internet users (% of individuals)	11.5
Hospital bed density (per 10 000 population)	18	Maternal mortality ratio (per 100 000 live births)	160
Life expectancy at birth (years)	66	Infant mortality rate (per 100 000 live births)	29 [10-63]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2009
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Do not know

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Do not know
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	Yes

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Do not know

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Do not know
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

Burkina Faso

Country indicators*				
Population (000s)	16,460	Total health expenditure (%GDP)	6.5
GNI per capita (PPP Int $)	1,490	ICT Development Index rank	154
Physician density (per 10 000 population)	0.05	Mobile-cellular subscriptions (% inhabitants)	60.61
Nurse and midwife density (per 10 000 population)	0.57	Internet users (% of individuals)	3.7
Hospital bed density (per 10 000 population)	4	Maternal mortality ratio (per 100 000 live births)	300
Life expectancy at birth (years)	56	Infant mortality rate (per 100 000 live births)	28 [17-46]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level,
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Public-private partnerships, Other sources

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	Yes

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Yes
Parental consent is required	No
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Burkina Faso

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Burundi

Country indicators*				
Population (000s)	9,850	Total health expenditure (%GDP)	8.7
GNI per capita (PPP Int $)	550	ICT Development Index rank	
Physician density (per 10 000 population)	0.03	Mobile-cellular subscriptions (% inhabitants)	22.81
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	1.2
Hospital bed density (per 10 000 population)	19	Maternal mortality ratio (per 100 000 live births)	800
Life expectancy at birth (years)	53	Infant mortality rate (per 100 000 live births)	36 [21-61]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	No		
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every year	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Burundi

*   Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Cambodia

Country indicators*

Population (000s)	14,865	Total health expenditure (%GDP)	5.7
GNI per capita (PPP Int $)	2,230	ICT Development Index rank	120
Physician density (per 10 000 population)	0.23	Mobile-cellular subscriptions (% inhabitants)	131.96
Nurse and midwife density (per 10 000 population)	0.79	Internet users (% of individuals)	4.9
Hospital bed density (per 10 000 population)		Maternal mortality ratio (per 100 000 live births)	461
Life expectancy at birth (years)	65	Infant mortality rate (per 100 000 live births)	18 [11-29]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Cambodia

Central African Republic

Country indicators*				
Population (000s)	4,525	Total health expenditure (%GDP)	3.8
GNI per capita (PPP Int $)	1,080	ICT Development Index rank	156
Physician density (per 10 000 population)	0.05	Mobile-cellular subscriptions (% inhabitants)	25.26
Nurse and midwife density (per 10 000 population)	0.26	Internet users (% of individuals)	3.0
Hospital bed density (per 10 000 population)	10	Maternal mortality ratio (per 100 000 live births)	890
Life expectancy at birth (years)	48	Infant mortality rate (per 100 000 live births)	41 [25-68]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	Both
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 4 years	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every 4 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 4 years	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every 4 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia		Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

China

Country indicators*				
Population (000s)	1,390,000	Total health expenditure (%GDP)	5.2
GNI per capita (PPP Int $)	9,040	ICT Development Index rank	78
Physician density (per 10 000 population)	1.46	Mobile-cellular subscriptions (% inhabitants)	80.76
Nurse and midwife density (per 10 000 population)	1.51	Internet users (% of individuals)	42.3
Hospital bed density (per 10 000 population)	42	Maternal mortality ratio (per 100 000 live births)	37
Life expectancy at birth (years)	76	Infant mortality rate (per 100 000 live births)	9 [6-12]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2005
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Electronic
Under 5 child mortality with the proportion of newborn deaths	Yes	More than every 5 yrs	Electronic
Children under 5 who are stunted	Yes	Every year	Electronic
Met need for contraception	Yes	Every year	Electronic
Antenatal care coverage	Yes	Every year	Electronic
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Electronic
Skilled attendant at birth	Yes	Every year	Electronic
Postnatal care for mothers and babies	Yes	Every year	Electronic
Exclusive breastfeeding for six months	Yes	Every year	Electronic
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Electronic
Antibiotic treatment for pneumonia	No		Electronic

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

China

Comoros

Country indicators*				
Population (000s)	718	Total health expenditure (%GDP)	5.3
GNI per capita (PPP Int $)	1,210	ICT Development Index rank	138
Physician density (per 10 000 population)	0.15	Mobile-cellular subscriptions (% inhabitants)	39.51
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	6.0
Hospital bed density (per 10 000 population)	22	Maternal mortality ratio (per 100 000 live births)	280
Life expectancy at birth (years)	62	Infant mortality rate (per 100 000 live births)	31 [17-54]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	More than every 5 yrs	Both
Children under 5 who are stunted	Yes	More than every 5 yrs	Both
Met need for contraception	Yes	More than every 5 yrs	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	More than every 5 yrs	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months			
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	Public funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Comoros

Côte d'Ivoire

Country indicators*				
Population (000s)	19,840	Total health expenditure (%GDP)	6.8
GNI per capita (PPP Int $)	1,920	ICT Development Index rank	137
Physician density (per 10 000 population)	0.14	Mobile-cellular subscriptions (% inhabitants)	91.23
Nurse and midwife density (per 10 000 population)	0.48	Internet users (% of individuals)	2.4
Hospital bed density (per 10 000 population)	4	Maternal mortality ratio (per 100 000 live births)	400
Life expectancy at birth (years)	56	Infant mortality rate (per 100 000 live births)	40 [23-68]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2011
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 4 years	Both
Children under 5 who are stunted	Yes	Every 4 years	Both
Met need for contraception	Yes	Every 4 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 4 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	No
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Côte d'Ivoire

Democratic People's Republic of Korea

Country indicators*				
Population (000s)	24,763	Total health expenditure (%GDP)	
GNI per capita (PPP Int $)		ICT Development Index rank	1
Physician density (per 10 000 population)	3.29	Mobile-cellular subscriptions (% inhabitants)	6.87
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	
Hospital bed density (per 10 000 population)	132	Maternal mortality ratio (per 100 000 live births)	81
Life expectancy at birth (years)	69	Infant mortality rate (per 100 000 live births)	16 [12-21]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2008
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2008
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level, Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 3 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	No		
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every 3 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	Do not know
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Democratic Republic of the Congo

Country indicators*				
Population (000s)	65,705	Total health expenditure (%GDP)	8.5
GNI per capita (PPP Int $)	390	ICT Development Index rank	147
Physician density (per 10 000 population)	0.11	Mobile-cellular subscriptions (% inhabitants)	30.58
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	1.7
Hospital bed density (per 10 000 population)	8	Maternal mortality ratio (per 100 000 live births)	540
Life expectancy at birth (years)	49	Infant mortality rate (per 100 000 live births)	44 [25-70]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio			
Under 5 child mortality with the proportion of newborn deaths			
Children under 5 who are stunted			
Met need for contraception			
Antenatal care coverage			
Prevention of mother-to-child HIV transmission (PMTCT)			
Skilled attendant at birth			
Postnatal care for mothers and babies			
Exclusive breastfeeding for six months			
3 doses of the combined diphtheria, pertussis and tetanus vaccine			
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

ICT training

Tertiary institutions offer ICT training for students of health sciences	
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	
ISPs are legally mandated to provide online safety tools to protect children	

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	

Democratic Republic of the Congo

Djibouti

Country indicators*				
Population (000s)	860	Total health expenditure (%GDP)	7.9
GNI per capita (PPP Int $)	2,100	ICT Development Index rank	131
Physician density (per 10 000 population)	0.23	Mobile-cellular subscriptions (% inhabitants)	24.72
Nurse and midwife density (per 10 000 population)	0.80	Internet users (% of individuals)	8.3
Hospital bed density (per 10 000 population)	14	Maternal mortality ratio (per 100 000 live births)	200
Life expectancy at birth (years)	58	Infant mortality rate (per 100 000 live births)	31 [19-51]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every 5 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 5 years	Paper
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Paper
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Djibouti

Equatorial Guinea

Country indicators*				
Population (000s)	736	Total health expenditure (%GDP)	4	
GNI per capita (PPP Int $)	18,570	ICT Development Index rank		
Physician density (per 10 000 population)	0.30	Mobile-cellular subscriptions (% inhabitants)	68.05	
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	13.9	
Hospital bed density (per 10 000 population)	21	Maternal mortality ratio (per 100 000 live births)	240	
Life expectancy at birth (years)	54	Infant mortality rate (per 100 000 live births)	34 [19-58]	

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	No
Policy/strategy refers to the use of eHealth, mHealth or social media	

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Paper
Under 5 child mortality with the proportion of newborn deaths	No		
Children under 5 who are stunted	No		
Met need for contraception	No		
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	No	Every year	Paper**
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	No		
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	Do not know
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Equatorial Guinea

Ethiopia

Country indicators*				
Population (000s)	91,729	Total health expenditure (%GDP)	4.7
GNI per capita (PPP Int $)	1,110	ICT Development Index rank	151
Physician density (per 10 000 population)	0.03	Mobile-cellular subscriptions (% inhabitants)	22.37
Nurse and midwife density (per 10 000 population)	0.25	Internet users (% of individuals)	1.5
Hospital bed density (per 10 000 population)	63	Maternal mortality ratio (per 100 000 live births)	350
Life expectancy at birth (years)	60	Infant mortality rate (per 100 000 live births)	29 [17-47]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Yes
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Ethiopia

Gambia

Population (000s)	1,791	Total health expenditure (%GDP)	4.4
GNI per capita (PPP Int $)	1,830	ICT Development Index rank	128
Physician density (per 10 000 population)	0.11	Mobile-cellular subscriptions (% inhabitants)	85.20
Nurse and midwife density (per 10 000 population)	0.87	Internet users (% of individuals)	12.4
Hospital bed density (per 10 000 population)	11	Maternal mortality ratio (per 100 000 live births)	360
Life expectancy at birth (years)	58	Infant mortality rate (per 100 000 live births)	28 [17-48]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	
Met need for contraception	Yes	More than every 5 yrs	Paper
Antenatal care coverage	Yes	Every 5 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Gambia

Ghana

Country indicators*				
Population (000s)	25,366	Total health expenditure (%GDP)	4.8
GNI per capita (PPP Int $)	1,910	ICT Development Index rank	113
Physician density (per 10 000 population)	0.09	Mobile-cellular subscriptions (% inhabitants)	100.99
Nurse and midwife density (per 10 000 population)	1.05	Internet users (% of individuals)	17.1
Hospital bed density (per 10 000 population)	9	Maternal mortality ratio (per 100 000 live births)	350
Life expectancy at birth (years)	64	Infant mortality rate (per 100 000 live births)	28 [17-47]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2005
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2008
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 3 years	Both
Children under 5 who are stunted	Yes	Every 3 years	Both
Met need for contraception	Yes	Every 3 years	Both
Antenatal care coverage	Yes	Every year	Electronic
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	
Exclusive breastfeeding for six months	Yes	Every 3 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every 3 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls,Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Yes
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Ghana

http://www.who.int/goe

Guatemala

Country indicators*			
Population (000s)	15,083	Total health expenditure (%GDP)	6.7
GNI per capita (PPP Int $)	4,880	ICT Development Index rank	
Physician density (per 10 000 population)	0.93	Mobile-cellular subscriptions (% inhabitants)	137.82
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	16.0
Hospital bed density (per 10 000 population)	6	Maternal mortality ratio (per 100 000 live births)	120
Life expectancy at birth (years)	69	Infant mortality rate (per 100 000 live births)	15 [10-23]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – full coverage
Year introduced	2008
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Guatemala

Guinea

Country indicators*				
Population (000s)	11,451	Total health expenditure (%GDP)	6
GNI per capita (PPP Int $)	970	ICT Development Index rank	152
Physician density (per 10 000 population)	0.10	Mobile-cellular subscriptions (% inhabitants)	41.75
Nurse and midwife density (per 10 000 population)	0.04	Internet users (% of individuals)	1.5
Hospital bed density (per 10 000 population)	3	Maternal mortality ratio (per 100 000 live births)	610
Life expectancy at birth (years)	55	Infant mortality rate (per 100 000 live births)	34 [20-56]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level, Regional/District level, Local level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	
Met need for contraception			Both
Antenatal care coverage			
Prevention of mother-to-child HIV transmission (PMTCT)			
Skilled attendant at birth			
Postnatal care for mothers and babies			
Exclusive breastfeeding for six months			
3 doses of the combined diphtheria, pertussis and tetanus vaccine			
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls,Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Guinea

Haiti

Country indicators*				
Population (000s)	10,174	Total health expenditure (%GDP)		7.9
GNI per capita (PPP Int $)	1,220	ICT Development Index rank		
Physician density (per 10 000 population)	0.25	Mobile-cellular subscriptions (% inhabitants)		59.91
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)		10.9
Hospital bed density (per 10 000 population)	13	Maternal mortality ratio (per 100 000 live births)		350
Life expectancy at birth (years)	63	Infant mortality rate (per 100 000 live births)		25 [17-36]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 2 years	Paper
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 2 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Haiti

India

Country indicators*				
Population (000s)	1,240,000	Total health expenditure (%GDP)	3.9
GNI per capita (PPP Int $)	3,910	ICT Development Index rank	121
Physician density (per 10 000 population)	0.65	Mobile-cellular subscriptions (% inhabitants)	69.92
Nurse and midwife density (per 10 000 population)	1.00	Internet users (% of individuals)	12.6
Hospital bed density (per 10 000 population)	9	Maternal mortality ratio (per 100 000 live births)	200
Life expectancy at birth (years)	65	Infant mortality rate (per 100 000 live births)	31 [24-39]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2006
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2009
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 3 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every 3 years	Both
Met need for contraception	Yes	Every 3 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)			
Skilled attendant at birth	Yes		Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Do not know
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

India

Indonesia

Country indicators*				
Population (000s)	247,000	Total health expenditure (%GDP)	2.7
GNI per capita (PPP Int $)	4,730	ICT Development Index rank	97
Physician density (per 10 000 population)	0.20	Mobile-cellular subscriptions (% inhabitants)	114.22
Nurse and midwife density (per 10 000 population)	1.38	Internet users (% of individuals)	15.4
Hospital bed density (per 10 000 population)	6	Maternal mortality ratio (per 100 000 live births)	220
Life expectancy at birth (years)	69	Infant mortality rate (per 100 000 live births)	15 [12-19]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2002
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes		Both
Children under 5 who are stunted	Yes	Every 3 years	Paper
Met need for contraception	Yes		Both
Antenatal care coverage	Yes		Both
Prevention of mother-to-child HIV transmission (PMTCT)			
Skilled attendant at birth	Yes		Both
Postnatal care for mothers and babies	Yes		Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes		Paper
Antibiotic treatment for pneumonia	Yes	Every year	

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Technology - filters and controls	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Yes
Parental consent is required	Do not know
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Indonesia

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

http://www.who.int/goe

Iraq

Country indicators*		
Population (000s)	32,778	
GNI per capita (PPP Int $)	4,230	
Physician density (per 10 000 population)	0.61	
Nurse and midwife density (per 10 000 population)	1.38	
Hospital bed density (per 10 000 population)	13	
Life expectancy at birth (years)	69	
Total health expenditure (%GDP)	8.3
ICT Development Index rank	
Mobile-cellular subscriptions (% inhabitants)	81.63
Internet users (% of individuals)	7.1
Maternal mortality ratio (per 100 000 live births)	63
Infant mortality rate (per 100 000 live births)	19 [13-28]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2004
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes		
Met need for contraception	Yes		
Antenatal care coverage	Yes		Paper
Prevention of mother-to-child HIV transmission (PMTCT)	No	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every year	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

http://www.who.int/goe

Kenya

Country indicators*				
Population (000s)	43,178	Total health expenditure (%GDP)	4.5
GNI per capita (PPP Int $)	1,730	ICT Development Index rank	116
Physician density (per 10 000 population)	0.18	Mobile-cellular subscriptions (% inhabitants)	
Nurse and midwife density (per 10 000 population)	0.79	Internet users (% of individuals)	32.1
Hospital bed density (per 10 000 population)	14	Maternal mortality ratio (per 100 000 live births)	360
Life expectancy at birth (years)	60	Infant mortality rate (per 100 000 live births)	27 [16-46]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2011
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2012
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Kenya

Kyrgyzstan

Country indicators*				
Population (000s)	5,474	Total health expenditure (%GDP)	6.5
GNI per capita (PPP Int $)	2,230	ICT Development Index rank	
Physician density (per 10 000 population)	2.47	Mobile-cellular subscriptions (% inhabitants)	124.18
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	21.7
Hospital bed density (per 10 000 population)	51	Maternal mortality ratio (per 100 000 live births)	71
Life expectancy at birth (years)	69	Infant mortality rate (per 100 000 live births)	14 [9-22]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2008
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	No		
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Other sources

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Kyrgyzstan

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Lao People's Democratic Republic

Country indicators*				
Population (000s)	6,646	Total health expenditure (%GDP)	2.8
GNI per capita (PPP Int $)	2,690	ICT Development Index rank	123
Physician density (per 10 000 population)	0.19	Mobile-cellular subscriptions (% inhabitants)	64.70
Nurse and midwife density (per 10 000 population)	0.82	Internet users (% of individuals)	10.7
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	470
Life expectancy at birth (years)	68	Infant mortality rate (per 100 000 live births)	27 [19-40]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Lesotho

Population (000s)	2,052	Total health expenditure (%GDP)	12.8
GNI per capita (PPP Int $)	2,170	ICT Development Index rank	126
Physician density (per 10 000 population)	0.05	Mobile-cellular subscriptions (% inhabitants)	75.30
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	4.6
Hospital bed density (per 10 000 population)	13	Maternal mortality ratio (per 100 000 live births)	620
Life expectancy at birth (years)	50	Infant mortality rate (per 100 000 live births)	45 [27-78]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	Yes

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	More than every 5 yrs	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 5 years	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Both
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Lesotho

Liberia

Country indicators*		
Population (000s)	4,190	
GNI per capita (PPP Int $)	580	
Physician density (per 10 000 population)	0.01	
Nurse and midwife density (per 10 000 population)	0.27	
Hospital bed density (per 10 000 population)	8	
Life expectancy at birth (years)	59	
Total health expenditure (%GDP)	19.5	
ICT Development Index rank	146	
Mobile-cellular subscriptions (% inhabitants)	57.12	
Internet users (% of individuals)	3.8	
Maternal mortality ratio (per 100 000 live births)	770	
Infant mortality rate (per 100 000 live births)	27 [16–45]	

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 2 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

Liberia

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

http://www.who.int/goe

Madagascar

Country indicators*				
Population (000s)	22,294	Total health expenditure (%GDP)	4.1
GNI per capita (PPP Int $)	930	ICT Development Index rank	149
Physician density (per 10 000 population)	0.16	Mobile-cellular subscriptions (% inhabitants)	39.38
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	2.1
Hospital bed density (per 10 000 population)	2	Maternal mortality ratio (per 100 000 live births)	240
Life expectancy at birth (years)	66	Infant mortality rate (per 100 000 live births)	22 [13-37]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	Do not know
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	Do not know
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Madagascar

Malawi

<table>
<tr><td rowspan="6">Country indicators*</td><td>Population (000s)</td><td>15,906</td><td>Total health expenditure (%GDP)</td><td>8.4</td></tr>
</table>

Country indicators*			
Population (000s)	15,906	Total health expenditure (%GDP)	8.4
GNI per capita (PPP Int $)	730	ICT Development Index rank	145
Physician density (per 10 000 population)	0.02	Mobile-cellular subscriptions (% inhabitants)	29.21
Nurse and midwife density (per 10 000 population)	0.34	Internet users (% of individuals)	4.4
Hospital bed density (per 10 000 population)	13	Maternal mortality ratio (per 100 000 live births)	460
Life expectancy at birth (years)	58	Infant mortality rate (per 100 000 live births)	24 [15-40]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Paper
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Other sources

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

Malawi

Mauritania

Country indicators*				
Population (000s)	3,796	Total health expenditure (%GDP)	5.4
GNI per capita (PPP Int $)	2,480	ICT Development Index rank	133
Physician density (per 10 000 population)	0.13	Mobile-cellular subscriptions (% inhabitants)	106
Nurse and midwife density (per 10 000 population)	0.67	Internet users (% of individuals)	5.4
Hospital bed density (per 10 000 population)	4	Maternal mortality ratio (per 100 000 live births)	510
Life expectancy at birth (years)	59	Infant mortality rate (per 100 000 live births)	34 [20-56]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2010
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes	Every year	Paper
Met need for contraception	Yes	Every year	Paper
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes	Every year	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Mauritania

Mexico

Country indicators*			
Population (000s)	121,000	Total health expenditure (%GDP)	6.2
GNI per capita (PPP Int $)	16,450	ICT Development Index rank	83
Physician density (per 10 000 population)	1.96	Mobile-cellular subscriptions (% inhabitants)	83.35
Nurse and midwife density (per 10 000 population)	3.98	Internet users (% of individuals)	38.4
Hospital bed density (per 10 000 population)	16	Maternal mortality ratio (per 100 000 live births)	50
Life expectancy at birth (years)	75	Infant mortality rate (per 100 000 live births)	7 [5-10]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	Before 2000
Implementation status	Yes
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – full coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Electronic
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Electronic
Children under 5 who are stunted			
Met need for contraception	No	Every year	Both**
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Electronic
Skilled attendant at birth	Yes		Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine			
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Do not know
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Technology - filters and controls	Yes
Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	Do not know
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Mexico

Morocco

Country indicators*				
Population (000s)	32,521	Total health expenditure (%GDP)	6
GNI per capita (PPP Int $)	5,060	ICT Development Index rank	89
Physician density (per 10 000 population)	0.62	Mobile-cellular subscriptions (% inhabitants)	119.97
Nurse and midwife density (per 10 000 population)	0.89	Internet users (% of individuals)	55.0
Hospital bed density (per 10 000 population)	11	Maternal mortality ratio (per 100 000 live births)	100
Life expectancy at birth (years)	72	Infant mortality rate (per 100 000 live births)	18 [12-25]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2005
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	
Postnatal care for mothers and babies	Yes	Every year	
Exclusive breastfeeding for six months	Yes	Every 5 years	
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	
Antibiotic treatment for pneumonia	Yes	Every year	

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	18

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Morocco

Mozambique

Country indicators*				
Population (000s)	25,203	Total health expenditure (%GDP)	6.6
GNI per capita (PPP Int $)	1,000	ICT Development Index rank	148
Physician density (per 10 000 population)	0.03	Mobile-cellular subscriptions (% inhabitants)	36.24
Nurse and midwife density (per 10 000 population)	0.34	Internet users (% of individuals)	4.8
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	490
Life expectancy at birth (years)	53	Infant mortality rate (per 100 000 live births)	30 [19-50]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	Ao nível nacional
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	
Met need for contraception	Yes	Every 5 years	
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 2 years	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Both
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Mozambique

Myanmar

Population (000s)	52,797	Total health expenditure (%GDP)	2
GNI per capita (PPP Int $)		ICT Development Index rank	134
Physician density (per 10 000 population)	0.50	Mobile-cellular subscriptions (% inhabitants)	
Nurse and midwife density (per 10 000 population)	0.86	Internet users (% of individuals)	1.1
Hospital bed density (per 10 000 population)	6	Maternal mortality ratio (per 100 000 live births)	200
Life expectancy at birth (years)	65	Infant mortality rate (per 100 000 live births)	26 [19-36]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	No
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Do not know
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes	Every 3 years	Paper
Met need for contraception	Yes	More than every 5 yrs	Paper
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes	Every 3 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 3 years	Paper
Antibiotic treatment for pneumonia	Yes	Every year	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Myanmar

*   Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Nepal

Country indicators*				
Population (000s)	27,474	Total health expenditure (%GDP)	5.4
GNI per capita (PPP Int $)	1,470	ICT Development Index rank	
Physician density (per 10 000 population)	0.21	Mobile-cellular subscriptions (% inhabitants)	59.62
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	11.1
Hospital bed density (per 10 000 population)	50	Maternal mortality ratio (per 100 000 live births)	170
Life expectancy at birth (years)	68	Infant mortality rate (per 100 000 live births)	24 [18-32]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Niger

Country indicators*				
Population (000s)	17,157	Total health expenditure (%GDP)	5.3
GNI per capita (PPP Int $)	760	ICT Development Index rank	157
Physician density (per 10 000 population)	0.02	Mobile-cellular subscriptions (% inhabitants)	31.45
Nurse and midwife density (per 10 000 population)	0.14	Internet users (% of individuals)	1.4
Hospital bed density (per 10 000 population)	3	Maternal mortality ratio (per 100 000 live births)	590
Life expectancy at birth (years)	56	Infant mortality rate (per 100 000 live births)	28 [17-48]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	No
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Education programs - for consumers and professionals	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Do not know
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Niger

Nigeria

Country indicators*

Population (000s)	169,000	Total health expenditure (%GDP)	5.3
GNI per capita (PPP Int $)	2,450	ICT Development Index rank	122
Physician density (per 10 000 population)	0.40	Mobile-cellular subscriptions (% inhabitants)	
Nurse and midwife density (per 10 000 population)	1.61	Internet users (% of individuals)	32.9
Hospital bed density (per 10 000 population)	5	Maternal mortality ratio (per 100 000 live births)	630
Life expectancy at birth (years)	53	Infant mortality rate (per 100 000 live births)	39 [24-64]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 2 years	Both
Children under 5 who are stunted	Yes	Every 2 years	Both
Met need for contraception	Yes	Every 2 years	Both
Antenatal care coverage	Yes	Every 2 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 2 years	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 2 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every 3 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

Nigeria

Pakistan

Country indicators*				
Population (000s)	179,000	Total health expenditure (%GDP)	2.5
GNI per capita (PPP Int $)	2,880	ICT Development Index rank	129
Physician density (per 10 000 population)	0.81	Mobile-cellular subscriptions (% inhabitants)	67.06
Nurse and midwife density (per 10 000 population)	0.56	Internet users (% of individuals)	10.0
Hospital bed density (per 10 000 population)	6	Maternal mortality ratio (per 100 000 live births)	260
Life expectancy at birth (years)	67	Infant mortality rate (per 100 000 live births)	42 [30-60]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2006
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 3 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 3 years	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Pakistan

Papua New Guinea

Country indicators*

Population (000s)	7,167	Total health expenditure (%GDP)	4.3
GNI per capita (PPP Int $)	2,740	ICT Development Index rank	
Physician density (per 10 000 population)	0.05	Mobile-cellular subscriptions (% inhabitants)	
Nurse and midwife density (per 10 000 population)	0.46	Internet users (% of individuals)	2.3
Hospital bed density (per 10 000 population)		Maternal mortality ratio (per 100 000 live births)	230
Life expectancy at birth (years)	63	Infant mortality rate (per 100 000 live births)	24 [15-36]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	More than every 5 yrs	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	More than every 5 yrs	Paper
Children under 5 who are stunted	Yes	More than every 5 yrs	Paper
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Papua New Guinea

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Peru

Country indicators*			
Population (000s)	29,988	Total health expenditure (%GDP)	4.8
GNI per capita (PPP Int $)	10,090	ICT Development Index rank	92
Physician density (per 10 000 population)	0.92	Mobile-cellular subscriptions (% inhabitants)	
Nurse and midwife density (per 10 000 population)	1.27	Internet users (% of individuals)	38.2
Hospital bed density (per 10 000 population)	15	Maternal mortality ratio (per 100 000 live births)	67
Life expectancy at birth (years)	77	Infant mortality rate (per 100 000 live births)	9 [6-14]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – full coverage
Year introduced	2012
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Peru

Philippines

Country indicators*		
Population (000s)	96,707	
GNI per capita (PPP Int $)	4,380	
Physician density (per 10 000 population)	1.15	
Nurse and midwife density (per 10 000 population)	6.00	
Hospital bed density (per 10 000 population)	5	
Life expectancy at birth (years)	69	
Total health expenditure (%GDP)	4.1	
ICT Development Index rank	98	
Mobile-cellular subscriptions (% inhabitants)	106.51	
Internet users (% of individuals)	36.2	
Maternal mortality ratio (per 100 000 live births)	99	
Infant mortality rate (per 100 000 live births)	14 [9-22]	

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2004
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Philippines

http://www.who.int/goe

Rwanda

Country indicators*		
Population (000s)	11,458	
GNI per capita (PPP Int $)	1,320	
Physician density (per 10 000 population)	0.06	
Nurse and midwife density (per 10 000 population)	0.69	
Hospital bed density (per 10 000 population)	16	
Life expectancy at birth (years)	60	

Total health expenditure (%GDP)	10.8
ICT Development Index rank	141
Mobile-cellular subscriptions (% inhabitants)	49.67
Internet users (% of individuals)	8.0
Maternal mortality ratio (per 100 000 live births)	340
Infant mortality rate (per 100 000 live births)	21 [13-35]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2006
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – full coverage
Year introduced	2009
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	
Type of resource tracking system	Electronic
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	
Children under 5 who are stunted	Yes	Every year	
Met need for contraception	Yes	Every year	
Antenatal care coverage	No	Every year	
Prevention of mother-to-child HIV transmission (PMTCT)		Every year	
Skilled attendant at birth	No	Every year	
Postnatal care for mothers and babies	No	Every year	
Exclusive breastfeeding for six months	No	Every year	
3 doses of the combined diphtheria, pertussis and tetanus vaccine		Every year	
Antibiotic treatment for pneumonia	No	Every year	

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

ICT training

Tertiary institutions offer ICT training for students of health sciences	
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Yes
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Yes
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Rwanda

Sierra Leone

Country indicators*				
Population (000s)	5,979	Total health expenditure (%GDP)	18.8
GNI per capita (PPP Int $)	1,340	ICT Development Index rank	
Physician density (per 10 000 population)	0.02	Mobile-cellular subscriptions (% inhabitants)	36.96
Nurse and midwife density (per 10 000 population)	0.17	Internet users (% of individuals)	1.3
Hospital bed density (per 10 000 population)	4	Maternal mortality ratio (per 100 000 live births)	890
Life expectancy at birth (years)	47	Infant mortality rate (per 100 000 live births)	50 [29-82]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 2 years	Both
Children under 5 who are stunted	Yes	Every 2 years	Both
Met need for contraception	Yes	Every 2 years	Both
Antenatal care coverage	Yes	Every 2 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 4 years	Both
Skilled attendant at birth	Yes	Every 2 years	Both
Postnatal care for mothers and babies	Yes	Every 2 years	Both
Exclusive breastfeeding for six months	Yes	Every 2 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 2 years	Both
Antibiotic treatment for pneumonia	Yes	Every 2 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Sierra Leone

*   Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Solomon Islands

Population (000s)	550	Total health expenditure (%GDP)	8.8
GNI per capita (PPP Int $)	2,130	ICT Development Index rank	125
Physician density (per 10 000 population)	0.22	Mobile-cellular subscriptions (% inhabitants)	54.98
Nurse and midwife density (per 10 000 population)	2.05	Internet users (% of individuals)	7.0
Hospital bed density (per 10 000 population)		Maternal mortality ratio (per 100 000 live births)	93
Life expectancy at birth (years)	70	Infant mortality rate (per 100 000 live births)	14 [8-21]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	No		
Met need for contraception	No		
Antenatal care coverage	No		
Prevention of mother-to-child HIV transmission (PMTCT)			
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	No		

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Technology - filters and controls	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Somalia

Country indicators*				
Population (000s)	10,195	Total health expenditure (%GDP)	2.3
GNI per capita (PPP Int $)		ICT Development Index rank	
Physician density (per 10 000 population)	0.04	Mobile-cellular subscriptions (% inhabitants)	22.56
Nurse and midwife density (per 10 000 population)	0.11	Internet users (% of individuals)	1.4
Hospital bed density (per 10 000 population)		Maternal mortality ratio (per 100 000 live births)	1,000
Life expectancy at birth (years)	50	Infant mortality rate (per 100 000 live births)	46 [30-68]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Do not know
Resource tracking system in place to report total health expenditure by financing source, per capita	Do not know
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Do not know
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio			
Under 5 child mortality with the proportion of newborn deaths	Yes		Paper
Children under 5 who are stunted			
Met need for contraception	Yes		Paper
Antenatal care coverage	Yes		Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes		Paper
Skilled attendant at birth	Yes		Paper
Postnatal care for mothers and babies			
Exclusive breastfeeding for six months	No		
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes		Paper
Antibiotic treatment for pneumonia			

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

ICT training

Tertiary institutions offer ICT training for students of health sciences	Do not know
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

Somalia

http://www.who.int/goe

South Africa

Country indicators*				
Population (000s)	52,386	Total health expenditure (%GDP)	8.5
GNI per capita (PPP Int $)	11,010	ICT Development Index rank	84
Physician density (per 10 000 population)	0.76	Mobile-cellular subscriptions (% inhabitants)	130.56
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	41.0
Hospital bed density (per 10 000 population)	28	Maternal mortality ratio (per 100 000 live births)	300
Life expectancy at birth (years)	58	Infant mortality rate (per 100 000 live births)	15 [9-26]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Electronic
Met need for contraception	Yes	Every year	Electronic
Antenatal care coverage	Yes	Every year	Electronic
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Electronic
Skilled attendant at birth	Yes	Every year	Electronic
Postnatal care for mothers and babies	Yes	Every year	Electronic
Exclusive breastfeeding for six months	Yes	Every year	Electronic
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Electronic
Antibiotic treatment for pneumonia		Every year	Electronic

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

South Africa

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

South Sudan

Country indicators*				
Population (000s)	10,838	Total health expenditure (%GDP)	1.6
GNI per capita (PPP Int $)		ICT Development Index rank	
Physician density (per 10 000 population)		Mobile-cellular subscriptions (% inhabitants)	21.22
Nurse and midwife density (per 10 000 population)		Internet users (% of individuals)	
Hospital bed density (per 10 000 population)		Maternal mortality ratio (per 100 000 live births)	
Life expectancy at birth (years)	54	Infant mortality rate (per 100 000 live births)	36 [24-53]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Do not know
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every 5 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	No		
Skilled attendant at birth	Yes	Every 5 years	Paper
Postnatal care for mothers and babies	Yes	Every 5 years	
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	No
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	No

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

South Sudan

Sudan

Country indicators*				
Population (000s)	37,195	Total health expenditure (%GDP)	8.4
GNI per capita (PPP Int $)	2,070	ICT Development Index rank	119
Physician density (per 10 000 population)	0.28	Mobile-cellular subscriptions (% inhabitants)	74.36
Nurse and midwife density (per 10 000 population)	0.84	Internet users (% of individuals)	21.0
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	730
Life expectancy at birth (years)	62	Infant mortality rate (per 100 000 live births)	29 [20-40]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2005
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 4 years	Paper
Children under 5 who are stunted	Yes	Every 4 years	Paper
Met need for contraception	Yes	Every 4 years	Paper
Antenatal care coverage	Yes	Every 4 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes		Paper
Skilled attendant at birth	Yes	Every 4 years	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes	Every 4 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 4 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	No
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Sudan

Swaziland

Country indicators*				
Population (000s)	1,231	Total health expenditure (%GDP)	8
GNI per capita (PPP Int $)	4,760	ICT Development Index rank	117
Physician density (per 10 000 population)	0.17	Mobile-cellular subscriptions (% inhabitants)	65.39
Nurse and midwife density (per 10 000 population)	1.60	Internet users (% of individuals)	20.8
Hospital bed density (per 10 000 population)	21	Maternal mortality ratio (per 100 000 live births)	320
Life expectancy at birth (years)	50	Infant mortality rate (per 100 000 live births)	30 [17-51]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 5 years	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Both
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Do not know
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	Do not know
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	Do not know
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Swaziland

*   Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Tajikistan

Country indicators*

Population (000s)	8,009	Total health expenditure (%GDP)	5.8
GNI per capita (PPP Int $)	2,180	ICT Development Index rank	
Physician density (per 10 000 population)	1.90	Mobile-cellular subscriptions (% inhabitants)	81.51
Nurse and midwife density (per 10 000 population)	4.48	Internet users (% of individuals)	14.5
Hospital bed density (per 10 000 population)	52	Maternal mortality ratio (per 100 000 live births)	65
Life expectancy at birth (years)	68	Infant mortality rate (per 100 000 live births)	23 [12-37]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2011
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – full coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	No		
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	No		
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Government intervention - laws, regulations, quality directives or guidelines	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Tajikistan

http://www.who.int/goe

Togo

Country indicators*				
Population (000s)	6,643	Total health expenditure (%GDP)	8
GNI per capita (PPP Int $)	900	ICT Development Index rank	
Physician density (per 10 000 population)	0.05	Mobile-cellular subscriptions (% inhabitants)	49.86
Nurse and midwife density (per 10 000 population)	0.27	Internet users (% of individuals)	4.0
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	300
Life expectancy at birth (years)	56	Infant mortality rate (per 100 000 live births)	33 [21-54]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2013
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 4 years	
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 2 years	
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every 3 years	Both
Antenatal care coverage	Yes	Every 2 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 2 years	Both
Skilled attendant at birth	Yes	Every 2 years	Both
Postnatal care for mothers and babies	Yes	Every 2 years	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 2 years	Both
Antibiotic treatment for pneumonia	Yes	Every 2 years	

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	No
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Services and applications - existing eHealth services are inaccessible, unaffordable, or not appropriate for our needs	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Technology - filters and controls	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Do not know
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Uganda

Country indicators*					
Population (000s)	36,346	Total health expenditure (%GDP)	9.5
GNI per capita (PPP Int $)	1,120	ICT Development Index rank	130
Physician density (per 10 000 population)	0.12	Mobile-cellular subscriptions (% inhabitants)	45.00
Nurse and midwife density (per 10 000 population)	1.31	Internet users (% of individuals)	14.7
Hospital bed density (per 10 000 population)	5	Maternal mortality ratio (per 100 000 live births)	310
Life expectancy at birth (years)	56	Infant mortality rate (per 100 000 live births)	23 [14-36]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2013
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Paper
Resource tracking system level	National level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every 5 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every 5 years	Paper
Postnatal care for mothers and babies	Yes	Every 5 years	Paper
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Paper
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

* Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

http://www.who.int/goe

United Republic of Tanzania

Country indicators*				
Population (000s)	47,783	Total health expenditure (%GDP)	7.3
GNI per capita (PPP Int $)	1,560	ICT Development Index rank	142
Physician density (per 10 000 population)	0.01	Mobile-cellular subscriptions (% inhabitants)	56.96
Nurse and midwife density (per 10 000 population)	0.24	Internet users (% of individuals)	13.1
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	460
Life expectancy at birth (years)	59	Infant mortality rate (per 100 000 live births)	21 [13-35]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2013
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2011
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level, Local level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Education programs - for consumers and professionals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Do not know
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Do not know
Parental consent is required	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Do not know
Parental consent is required	Do not know
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Do not know

United Republic of Tanzania

*   Data source: www.who.int/goe/publications/cp_source2013
** Inconsistent data

Uzbekistan

Country indicators*				
Population (000s)	28,541	Total health expenditure (%GDP)	5.4
GNI per capita (PPP Int $)	3,670	ICT Development Index rank	104
Physician density (per 10 000 population)	2.54	Mobile-cellular subscriptions (% inhabitants)	71.03
Nurse and midwife density (per 10 000 population)	10.68	Internet users (% of individuals)	36.5
Hospital bed density (per 10 000 population)	46	Maternal mortality ratio (per 100 000 live births)	28
Life expectancy at birth (years)	68	Infant mortality rate (per 100 000 live births)	14 [7-23]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2009
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	Yes

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2009
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level, Regional/District level

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every year	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Both
Children under 5 who are stunted	Yes	Every year	Both
Met need for contraception	Yes	Every year	Both
Antenatal care coverage	Yes	Every year	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Both
Skilled attendant at birth	Yes	Every year	Both
Postnatal care for mothers and babies	Yes	Every year	Both
Exclusive breastfeeding for six months	Yes	Every year	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Both
Antibiotic treatment for pneumonia	Yes	Every year	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Donor funding

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Education programs - for consumers and professionals	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	Yes
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Do not know
Parental access to a child's EMR/EHR is possible	Do not know
Correction of errors in a child's EMR/EHR is possible	Do not know
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	Yes
Parental consent is required	Yes
Legislation exists which grants a child the right to control over its EMR/EHR	Do not know
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Uzbekistan

http://www.who.int/goe

Viet Nam

Country indicators*				
Population (000s)	90,796	Total health expenditure (%GDP)	6.8
GNI per capita (PPP Int $)	3,620	ICT Development Index rank	88
Physician density (per 10 000 population)	1.22	Mobile-cellular subscriptions (% inhabitants)	147.66
Nurse and midwife density (per 10 000 population)	1.01	Internet users (% of individuals)	39.5
Hospital bed density (per 10 000 population)	31	Maternal mortality ratio (per 100 000 live births)	59
Life expectancy at birth (years)	75	Infant mortality rate (per 100 000 live births)	12 [9-18]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2011
Implementation status	Partly implemented
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	Yes
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Do not know
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Both
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every year	Paper
Children under 5 who are stunted	Yes	Every year	Paper
Met need for contraception			
Antenatal care coverage	No		
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Paper
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes		
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Do not know
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Legal - lack of legal frameworks to support implementation of eHealth services	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government intervention - laws, regulations, quality directives or guidelines	Yes
Official approval - certification, accreditation, seals of approval, or quality seals	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Yes
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Do not know
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	No
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Viet Nam

Yemen

Country indicators*				
Population (000s)	23,852	Total health expenditure (%GDP)	5.5
GNI per capita (PPP Int $)	2,310	ICT Development Index rank	127
Physician density (per 10 000 population)	0.20	Mobile-cellular subscriptions (% inhabitants)	58.28
Nurse and midwife density (per 10 000 population)	0.68	Internet users (% of individuals)	17.4
Hospital bed density (per 10 000 population)	7	Maternal mortality ratio (per 100 000 live births)	200
Life expectancy at birth (years)	64	Infant mortality rate (per 100 000 live births)	27 [18-41]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	No
Year adopted	
Implementation status	
Refers to the use of eHealth in women's and children's health policy/strategy	
Special funding allocated for implementation	No

Women's and children's health

National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	No
Year introduced	
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every 5 years	Paper
Prevention of mother-to-child HIV transmission (PMTCT)	No		
Skilled attendant at birth	Yes	Every 5 years	Paper
Postnatal care for mothers and babies		Every 5 years	Paper
Exclusive breastfeeding for six months	Yes	Every 5 years	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Electronic
Antibiotic treatment for pneumonia	Yes	Every 5 years	Paper

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Do not know
Funding sources	

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	Yes
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	
Parental access to a child's EMR/EHR is possible	
Correction of errors in a child's EMR/EHR is possible	
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	No
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Yemen

http://www.who.int/goe

Zambia

Country indicators*				
Population (000s)	14,075	Total health expenditure (%GDP)	6.1
GNI per capita (PPP Int $)	1,590	ICT Development Index rank	132
Physician density (per 10 000 population)	0.07	Mobile-cellular subscriptions (% inhabitants)	74.78
Nurse and midwife density (per 10 000 population)	0.78	Internet users (% of individuals)	13.5
Hospital bed density (per 10 000 population)	20	Maternal mortality ratio (per 100 000 live births)	440
Life expectancy at birth (years)	55	Infant mortality rate (per 100 000 live births)	29 [17-51]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	Yes
Refers to the use of eHealth in women's and children's health policy/strategy	Yes
Special funding allocated for implementation	

Women's and children's health

National policy/strategy for women's and children's health exists	No
Policy/strategy refers to the use of eHealth, mHealth or social media	

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	Before 2000
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Both
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Both
Children under 5 who are stunted	Yes	Every 5 years	Both
Met need for contraception	Yes	Every 5 years	Both
Antenatal care coverage	Yes	Every 5 years	Both
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every 5 years	Both
Skilled attendant at birth	Yes	Every 5 years	Both
Postnatal care for mothers and babies	Yes	Every 5 years	Both
Exclusive breastfeeding for six months	Yes	Every 5 years	Both
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every 5 years	Both
Antibiotic treatment for pneumonia	Yes	Every 5 years	Both

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Public funding, Private funding, Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Infrastructure - not yet adequate, accessible, or cost-effective to support desired services	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes
Financial - limited or no reimbursement by insurance companies for services; business models not yet developed for broad and sustainable eHealth delivery	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Government website - providing education and information to information consumers	Yes
Dedicated website(s) - concerning women's & children's health	No

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	No
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Yes

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	Yes
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	Yes
Parental consent required for the creation of a child's EMR/EHR	Yes
Parental access to a child's EMR/EHR is possible	Yes
Correction of errors in a child's EMR/EHR is possible	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	Yes
Parental consent is required	Yes
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	No

Zambia

Zimbabwe

Country indicators*

Population (000s)	13,724	Total health expenditure (%GDP)	0.7
GNI per capita (PPP Int $)		ICT Development Index rank	115
Physician density (per 10 000 population)	0.06	Mobile-cellular subscriptions (% inhabitants)	91.91
Nurse and midwife density (per 10 000 population)	1.25	Internet users (% of individuals)	17.1
Hospital bed density (per 10 000 population)	17	Maternal mortality ratio (per 100 000 live births)	570
Life expectancy at birth (years)	54	Infant mortality rate (per 100 000 live births)	39 [22-66]

eHealth policy/strategy
Status of eHealth and women's and children's health policy/strategy

National eHealth policy/strategy exists	Yes
Year adopted	2012
Implementation status	No
Refers to the use of eHealth in women's and children's health policy/strategy	No
Special funding allocated for implementation	No
Women's and children's health	
National policy/strategy for women's and children's health exists	Yes
Policy/strategy refers to the use of eHealth, mHealth or social media	No

eHealth systems
An overview of the types of eHealth systems in place, their purpose and level

Electronic information system collects and reports births, deaths and causes of death data	Yes – partial coverage
Year introduced	2010
At least one electronic information system exists at the district level to collect and report health data	Yes
Resource tracking system in place to report total health expenditure by financing source, per capita	Yes
Type of resource tracking system	Electronic
Resource tracking system level	National level, Regional/District level
Resource tracking system in place to report total reproductive, maternal, newborn, and child health (RMNCH) expenditure by financing source, per capita	No
Type of resource tracking system	
Resource tracking system level	

Monitoring the status of women's and children's health
An overview of the measurement of the 11 CoIA indicators by monitoring frequency and format

Indicator measured	Monitor	Frequency	Format: Paper, Electronic, or Both
Maternal mortality ratio	Yes	Every 5 years	Paper
Under 5 child mortality with the proportion of newborn deaths	Yes	Every 5 years	Paper
Children under 5 who are stunted	Yes	Every 5 years	Paper
Met need for contraception	Yes	Every 5 years	Paper
Antenatal care coverage	Yes	Every year	Electronic
Prevention of mother-to-child HIV transmission (PMTCT)	Yes	Every year	Electronic
Skilled attendant at birth	Yes	Every year	Paper
Postnatal care for mothers and babies	Yes	Every year	Paper
Exclusive breastfeeding for six months	Yes	Every year	Paper
3 doses of the combined diphtheria, pertussis and tetanus vaccine	Yes	Every year	Electronic
Antibiotic treatment for pneumonia	Yes	Every year	Electronic

eHealth initiatives – national overview

eHealth supports major women's and children's health initiatives	Yes
Funding sources	Donor funding, Public-private partnerships

World Health Organization

Possible barriers to implementing eHealth services
The most important barriers hindering the implementation of eHealth services

Leadership, governance and policy - country policy or strategy does not include eHealth as an approach to support women's and children's health	Yes
Legal - lack of legal frameworks to support implementation of eHealth services,	Yes
Standards - lack of nationally adopted standards (e.g.ICD, DICOM, HL7, SNOMED) for the systematic adoption of eHealth services or health information systems	Yes
Human resources - lack of suitably qualified or experienced professionals who can develop and implement eHealth projects and promote their use	Yes

ICT training

Tertiary institutions offer ICT training for students of health sciences	Yes
Continuing education in ICT for health professionals	No

Internet health information quality
Approaches taken to ensure quality of health-related content on the Internet

Voluntary compliance - by content providers or website owners to quality criteria for health-related sites	Yes
Technology - filters and controls	Yes
Dedicated website(s) - concerning women's & children's health	Yes

Online safety for children
Approaches taken by government to protect children in the online environment

Government provides information and education to citizens on internet safety and literacy	Do not know
Some initiatives are aimed specifically to protect children	
Safety tools and security technologies are required by law for schools, libraries and other public places where children have Internet access	No
ISPs are legally mandated to provide online safety tools to protect children	Do not know

Privacy and security of personal and health-related data
Legislation to protect women and children

Privacy laws exist to protect citizens' personal identifiable data irrespective of format (paper or digital)	No
Privacy laws exist to protect citizens' health data held in digitized format in an Electronic Medical Record (EMR) or Electronic Health Record (EHR)	No
Parental consent required for the creation of a child's EMR/EHR	No
Parental access to a child's EMR/EHR is possible	No
Correction of errors in a child's EMR/EHR is possible	No
Legislation exists enabling the sharing of EMR/EHR between health care entities within the same country	No
Parental consent is required	
Legislation exists enabling the sharing of EMR/EHR between health care entities in other countries	No
Parental consent is required	
Legislation exists which grants a child the right to control over its EMR/EHR	No
From age (years)	

Social media
Countries are recognizing the benefit of using social media for health

Some health programmes use social media (eg. Facebook, Twitter, YouTube)	Yes

Zimbabwe

* Data source: www.who.int/goe/publications/cp_source2013
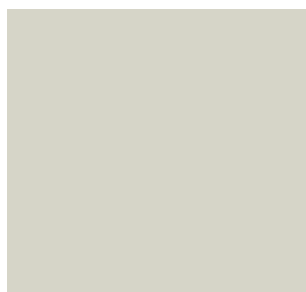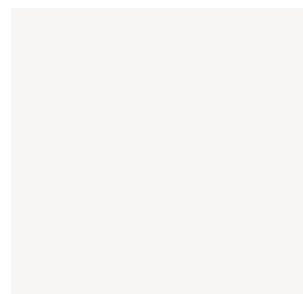** Inconsistent data

World Health
Organization

2013

Atlas of eHealth Country Profiles

eHealth and innovation in women's and children's health

Based on the findings of the 2013 survey of CoIA countries by the WHO Global Observatory for eHealth