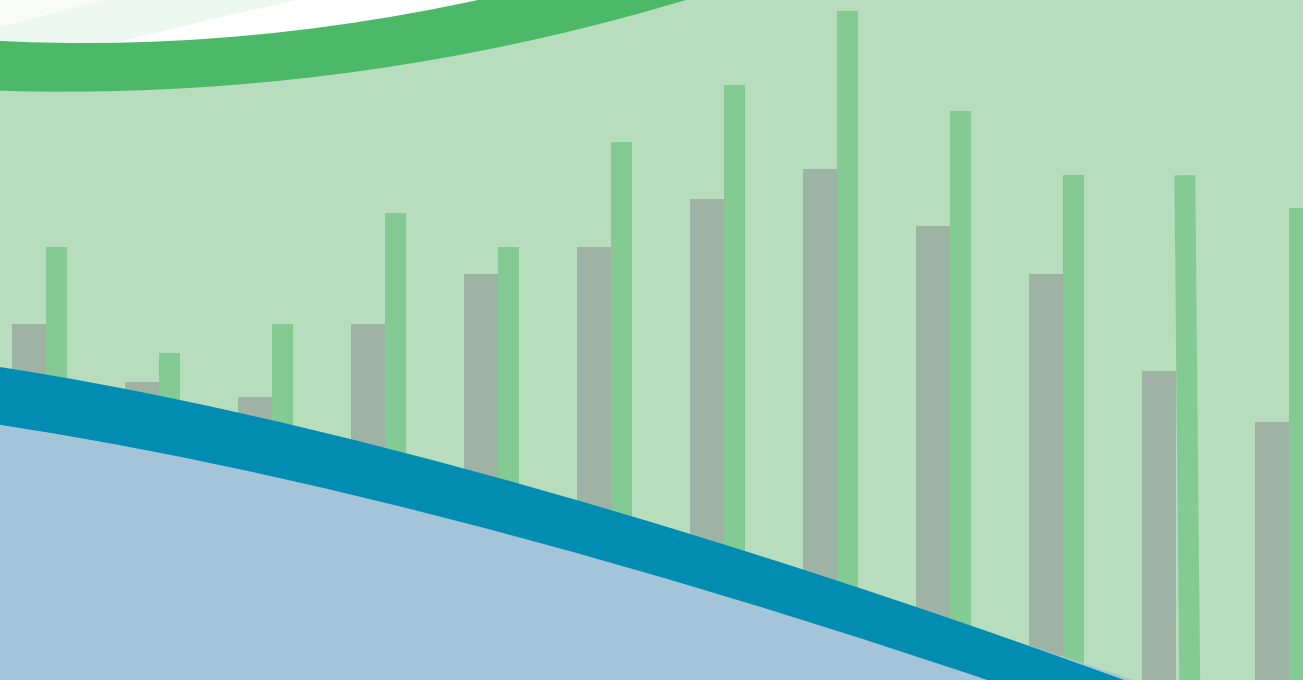


# Eastern Mediterranean Region

Framework for health information systems  
and core indicators for monitoring health  
situation and health system performance

2014



World Health  
Organization

Regional Office for the Eastern Mediterranean



# Foreword

Reliable and timely health information is essential for policy development, proper health management, evidence-based decision-making, rational resource allocation and monitoring and evaluation. While the demand for health information is increasing in terms of quantity, quality and levels of disaggregation, the response to these needs has been hampered because of fragmentation and major gaps in national health information systems.

Strengthening health information systems has been a top priority of WHO in this region since 2012. Intensive work with Member States over the past two years has resulted in a clear framework for health information system that focuses on three key components: 1) monitoring health determinants and risks; 2) assessing health status including morbidity and cause specific mortality; and 3) assessing health system performance.

Work has included an in-depth review of national health information systems through expert consultations, intercountry meetings and comprehensive assessment of civil registration and vital statistics conducted in most countries of the Region. This effort led to the development and finalization of a list of core indicators, under each of the three key components.

In order to facilitate standardized data collection, analysis and reporting of the core indicators, a detailed indicator metadata registry was also developed, based on the WHO global metadata registry, to reflect the regional context. The registry includes a description of the following attributes for each indicator: purpose, definition and related terms, main data sources, measurement and estimation methods, data type, expected frequency of data collection and reporting, level of disaggregation and stratification, and any limitations in data collection, measurement and reporting.

The old set of indicators has been replaced with the new list, using available data drawn from multiple sources, including figures provided by Member States, World Health Statistics 2014, Global Health Observatory, and estimates developed by United Nations agencies including WHO. Every effort has been made to incorporate the most comprehensive, recent and reliable data, and to validate these data with countries within a very short time-frame.

Our systematic review over the past two years revealed major gaps in obtaining reliable data for several core indicators. The gaps highlight the need for concerted efforts to build the capacity of Member States in generating, analysing and disseminating data for these key indicators. This will be the focus of our work with the Member States over the coming two years.

**Dr Ala Alwan**

Regional Director for the Eastern Mediterranean

# Framework for health information systems and core indicators

## Health determinants and risks

### Demographic and socioeconomic determinants

- Population size
- Population growth
- Total fertility
- Adolescent fertility (15-19 years)
- Net primary school enrolment ratio
- Proportion of population below the international poverty line
- Adult literacy rate (15-24 years)
- Access to improved drinking water
- Access to improved sanitation facilities

### Risk factors

- Low birth weight
- Exclusive breastfeeding for 6 months
- Children under 5 who are stunted
- Children under 5 who are wasted
- Children under 5 who are overweight
- Children under 5 who are obese
- Overweight (13-18 years)
- Obesity (13-18 years)
- Overweight (18+ years)
- Obesity (18+ years)
- Tobacco use (13-15 years)
- Tobacco use (15+ years)
- Insufficient physical activity (13-18 years)
- Insufficient physical activity (18+ years)
- Raised blood glucose (18+ years)
- Raised blood pressure (18+ years)
- Anaemia among women of reproductive age

## Health status

### Life expectancy and mortality

- Life expectancy at birth
- Neonatal mortality
- Infant mortality
- Under-5 mortality
- Maternal mortality ratio
- Mortality rate by main cause of death (age-standardized)
- Mortality between ages 30 and 70 from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases
- Mortality rate due to road traffic injuries

### Morbidity

- Cancer incidence by type
- Tuberculosis case notification
- Estimated number of new HIV infections
- Number of newly reported HIV cases
- Incidence of confirmed malaria cases
- Incidence of measles cases

## Health system response

### Health financing

- Per capita total health expenditure
- Out-of-pocket expenditure as % of total health expenditure
- General government expenditure on health as % of general government expenditure
- Population with catastrophic health expenditure
- Population impoverished due to out-of-pocket health expenditure

### Health workforce

- Density of health workers: a-physicians, b-nurses, c-midwives, d-pharmacists, e-dentists
- Density of recent graduates of registered health profession educational institutions

### Health information system

- Birth registration coverage
- Death registration coverage

### Medicines and medical devices

- Availability of selected essential medicines in health facilities
- Density per million population of 6 selected medical devices in public and private health facilities

### Service delivery

- Density of primary health care facilities
- Density of inpatient beds (hospitals)
- Surgical wound infection rate
- Annual number of outpatient department visits, per capita

### Service coverage

- Need for contraception satisfied
- Antenatal care coverage (1+;4+)
- Skilled birth attendance
- Children under 5 with diarrhoea receiving oral rehydration therapy
- DPT3/pentavalent vaccination coverage among children under 1 year of age
- Measles immunization coverage (MCV1)
- Service coverage for severe mental disorders
- Treatment success rate of new bacteriologically confirmed tuberculosis cases
- Percentage of suspected malaria cases that have had a diagnostic test
- Percentage of individuals who slept under an ITN the previous night
- Adults and children currently receiving ARV therapy among all adults and children living with HIV
- Percentage of key populations at higher risk (who inject drugs, sex workers, men who have sex with men) who have received an HIV test in the past 12 months and know their results

# Demographic and socioeconomic determinants indicators

Country	Population 2013		Population growth		Life expectancy at birth (years), 2012			Adult literacy rate (15-24 years)				Net primary school enrolment ratio				Population below the international poverty line		Total fertility (per woman), 2012	Adolescent fertility (15-19 years) per 1000 girls	
	Total (000s)	Urban %	R	Y	T	M	F	T %	M %	F %	Y	T %	M %	F %	Y	%	Y	R	R	Y
Afghanistan	28 100	24	2.0	2012	60.0	58.0	61.0	31	45	17	2012	57	64	48	2012	...	...	5.1	90.0	2012
Bahrain	1 200 <sup>a</sup>	100	5.8	2010	77.0	76.0	78.0	94	97	90	2010	100	100	100	2010	...	...	2.1	14.9	2012
Djibouti	860	84 <sup>d</sup>	1.5	2012	61.0	60.0	63.0	...	...	...	...	...	...	...	...	...	...	3.5 <sup>f</sup>	...	...
Egypt	84 628	43 <sup>a</sup>	2.5	2013	71.0	69.0	74.0	70	78	65	2011	...	...	...	...	...	...	2.8	50.0	2012
Iran, Islamic Republic of	76 942	72	1.2	2013	74.0	72.0	76.0	83	87	79	2011	99	99	99	2013	...	...	1.9	15.1	2013
Iraq	35 095	69	3.2	2013	70.0	66.0	74.0	21	78 <sup>b</sup>	...	2012	92	94	84	2013	17.8	2013	4.1	72.0	2013
Jordan	6 530	83	2.2	2013	74.0	72.0	75.0	93	96	90	2013	98	97	99	2013	...	...	3.3	26.0	2012
Kuwait	3 806 <sup>a</sup>	100	14.1	2012	78.0	78.0	79.0	95	96 <sup>c</sup>	94 <sup>c</sup>	2012	100	97	100	2012	...	...	2.6	13.0	2012
Lebanon	4 168	85 <sup>b</sup>	1.6	2013	80.0	78.0	82.0	99	99	99	2009	...	...	...	...	...	...	1.5	...	...
Libya	6 028	86	2.8	2009	75.0	73.0	77.0	90	94 <sup>d</sup>	83 <sup>d</sup>	2011	...	...	...	...	...	...	2.4	...	...
Morocco	32 950	59	1.0	2013	71.0	69.0	73.0	67	69 <sup>d</sup>	44 <sup>d</sup>	2011	97	90	85	2012	...	...	2.6	32.0	2011
Oman	3 855	75 <sup>c</sup>	3.1	2013	76.0	74.0	78.0	88	92	83	2010	98	98	97	2011	...	...	2.9	13.9	2013
Pakistan	184 350	38	2.0	2013	65.0	64.0	66.0	58	70	47	2013	64	68	60	2013	...	...	3.8	16.0	2012
occupied Palestinian territory	4 485	73	2.9	2013	72.9	71.5	74.4 <sup>f</sup>	96	98	94	2012	99	99	100	2012	...	...	4.4	...	...
Qatar	2 003	100	5.8	2012	79.0	79.0	80.0	98	97 <sup>b</sup>	96 <sup>b</sup>	2013	100	95	95	2012	...	...	2.0	12.4	2013
Saudi Arabia	29 994	83 <sup>a</sup>	2.7	2013	76.0	74.0	78.0	99	91 <sup>c</sup>	83 <sup>c</sup>	2012	97	97	97	2012	...	...	2.7	...	...
Somalia	10 195	37 <sup>d</sup>	2.9	2012	53.0	51.0	55.0	...	...	...	...	...	...	...	...	...	...	6.7	...	...
Sudan	36 163	30 <sup>a</sup>	2.5	2008	63.0	61.0	65.0	50	58 <sup>c</sup>	42 <sup>c</sup>	2011	62	65	59	2011	...	...	4.5	...	...
Syrian Arab Republic	21 639 <sup>a</sup>	54 <sup>a</sup>	2.5	2010	68.0	62.0	76.0	86	91	80	2009	95	94	96	2009	...	...	3.0	54.0	2009
Tunisia	10 778 <sup>a</sup>	66 <sup>a</sup>	1.3	2012	76.0	74.0	78.0	97	98	96	2011	99	99	99	2012	15.5	2010	2.0	3.0	2012
United Arab Emirates	9 206 <sup>a</sup>	...	3.1	2012	76.0	76.0	78.0	94	92 <sup>c</sup>	93 <sup>c</sup>	2009	...	...	...	...	...	...	1.8	34.0	2012
Yemen	25 235	29	3.0	2013	64.0	62.0	65.0	34	41	26	2006	...	...	...	...	...	...	4.4	67.0	2013

# Health determinants and risks

Country	Biological					Nutritional											
	Low birth weight	Exclusive breastfeeding for 6 months	Raised blood glucose (18+ years)	Raised blood pressure (18+ years)	Y	Children under 5 who are				Y	Youth (13-18 years)		Adults (18+ years)		Y	Anaemia among women of reproductive age (15-49 years)	Y
						stunted	wasted	overweight	obese		Overweight	Obesity	Overweight	Obesity			
						%	%	%	%		%	%	%	%			
Afghanistan	6.0 <sup>c</sup>	30.6	...	...	2013	40.9	9.5	5.4	2.0	2013	...	...	...	...	...	40.4	2013
Bahrain	2.0	12.5	...	...	2012	2.4	14.0	2.3	0.8	2012	...	...	...	...	...	...	...
Djibouti	...	...	...	...	...	33.5	21.5	8.1	...	2012	...	...	...	...	...	...	...
Egypt	6.0	53.2 <sup>e</sup>	17.2	39.7	2011	31.0	7.9	21.5	...	2011	32.5 <sup>b</sup>	7.0 <sup>b</sup>	62.2	31.3	2012	50.0	2012
Iran, Islamic Republic of	7.7	23.0	...	16.1 <sup>d</sup>	2010	6.8	4.0	4.9	1.9	2010	...	...	28.8	15.2	2012	...	...
Iraq	13.0	20.0	...	...	2011	22.6	7.4	11.8	...	2011	25.3	7.9	...	...	2012	33.5	2012
Jordan	7.0 <sup>a</sup>	...	...	...	2013	7.7	2.4	4.4	...	2012	...	...	...	...	...	19.0	2012
Kuwait	7.8 <sup>a</sup>	38.3	...	...	2013	4.8	2.7	5.7	2.1	2013	51.4	22.7	...	...	2011	...	...
Lebanon	7.7	15.0 <sup>a</sup>	11.4 <sup>d</sup>	28.4 <sup>d</sup>	2013	16.5	6.6	16.7	3.3	2011	24.1	6.7	65.4 <sup>d</sup>	27.4 <sup>d</sup>	2011	...	...
Libya	4.0	...	16.4	40.6	2009	...	...	...	...	...	...	...	63.5	30.5	2009	...	...
Morocco	8.1	31.0	...	...	2011	14.9	2.3	9.9	2.6	2011	14.1	2.5	...	...	2010	...	...
Oman	10.2	...	12.3 <sup>e</sup>	40.3 <sup>e</sup>	2013	9.8	7.1	2	0.4	2009	...	...	29.5	24.1	2008	26.7	2012
Pakistan	25.0	...	...	...	2013	43	14.8	6.4	...	2012	6.5	1.0	...	...	2009	26.0	2011
occupied Palestinian territory	9.4	27.0	8.5 <sup>b</sup>	35.8 <sup>b</sup>	2013	10.3	4.4	20.0	1.9	2013	22.2 <sup>c</sup>	6.1 <sup>c</sup>	56.8	26.8	2011	27.0	2013
Qatar	5.3	...	16.7 <sup>a</sup>	32.9 <sup>a</sup>	2013	...	10.1	12.9	14.0	2010	...	...	70.1 <sup>a</sup>	41.4 <sup>a</sup>	2013	24.7	2010
Saudi Arabia	9.1	...	...	...	2013	10.1	...	26.3	11.0	2010	...	...	...	...	...	29.2	2010
Somalia	5.0	...	...	...	2008	42.1	13.2	4.7	...	2009	...	...	...	...	...	50.0	2009
Sudan	31.0	41.0 <sup>c</sup>	...	...	2011	35.0	16.4	3.0	...	2010	11.4	3.6	...	...	2012	23.0	2010
Syrian Arab Republic	10.3	...	...	...	2009	27.5	11.5	17.9	...	2011	21.7	5.8	...	...	2010	...	...
Tunisia	6.9	...	...	...	2012	10.1	2.8	14.3	...	2012	...	...	...	...	...	...	...
United Arab Emirates	3.2	...	...	...	2010	15.5	...	7.7	7.7	2008	38.4	14.4	...	...	2010	...	...
Yemen	32.0 <sup>c</sup>	12.0	...	...	2013	47.0	16.0	8.8	...	2013	11.8	4.4	...	...	2008	...	...

# Health determinants and risks

Country	Behavioural									Environmental, 2012	
	Insufficient physical activity (13-18 years)	Insufficient physical activity (18+ years)	Y	Tobacco use (13-15 years), 2011			Tobacco use (15+ years), 2011			Access to improved drinking water	Access to improved sanitation facilities
				T	M	F	T	M <sup>g</sup>	F <sup>g</sup>		
				%	%	%	%	%	%		
Afghanistan	...	...	...	9.8 <sup>c</sup>	13.1 <sup>c</sup>	3.2 <sup>c</sup>	...	...	...	64	29
Bahrain	...	...	...	...	...	...	25.0	35.0	8.0	100	99
Djibouti	...	...	...	19.0 <sup>d</sup>	22.7 <sup>d</sup>	14.3 <sup>d</sup>	...	...	...	92	61
Egypt	83.5 <sup>b</sup>	32.1	2012	5.1	7.2	2.8	26.0	46.0	<1	99	96
Iran, Islamic Republic of	...	39.0	2009	...	...	...	14.0	26.0	<1	96	89
Iraq	80.0	...	2012	13.4 <sup>e</sup>	13.9 <sup>e</sup>	11.6 <sup>e</sup>	18.0	31.0	4.0	85	85
Jordan	...	...	...	26.1 <sup>d</sup>	34.1 <sup>d</sup>	19.4 <sup>d</sup>	26.0	47.0	6.0	96	98
Kuwait	79.1	...	2011	17.0	25.0	8.5	19.0	35.0	4.0	99	100
Lebanon	65.4	45.8 <sup>d</sup>	2011	36.2	41.9	31.4	32.0	...	...	100	...
Libya	...	43.9	2009	8.1 <sup>c</sup>	11 <sup>c</sup>	5 <sup>c</sup>	23.0	45.0	<1	98 <sup>d</sup>	97
Morocco	82.6	...	2010	9.5 <sup>c</sup>	11.3 <sup>c</sup>	6.6 <sup>c</sup>	17.0	32.0	2.0	84	75
Oman	77.8	...	2010	3.3 <sup>c</sup>	4.9 <sup>c</sup>	1.7 <sup>c</sup>	8.0	13.0	<1	93	97
Pakistan	84.5	...	2009	9.8 <sup>d</sup>	15 <sup>d</sup>	1.9 <sup>d</sup>	23.0	38.0	7.0	91	48
occupied Palestinian territory	78.6 <sup>c</sup>	46.5	2011	21.3 <sup>c</sup>	32.5 <sup>c</sup>	9.8 <sup>c</sup>	20.2	39.0	3.0	92 <sup>f</sup>	99 <sup>f</sup>
Qatar	85.0 <sup>b</sup>	45.9	2012	29.9	41.8	17.8	...	...	...	100	100
Saudi Arabia	...	...	...	14.9 <sup>c</sup>	21.2 <sup>c</sup>	9.1 <sup>c</sup>	22.0	38.0	<1	97	100
Somalia	...	...	...	...	...	...	...	...	...	31 <sup>c</sup>	23 <sup>c</sup>
Sudan	89.0	...	2012	8.8 <sup>a</sup>	10.9 <sup>a</sup>	6.6 <sup>a</sup>	13.0	...	...	55	24
Syrian Arab Republic	84.9	...	2010	24.5 <sup>c</sup>	31.6 <sup>c</sup>	17.4 <sup>c</sup>	26.5 <sup>d</sup>	...	...	90	96
Tunisia	81.5	...	2008	11.4 <sup>c</sup>	20.1 <sup>c</sup>	3.8 <sup>c</sup>	32.0	52.0	11.0	97	90
United Arab Emirates	80.8	...	2010	14.0	21.3	9.0	25.4 <sup>c</sup>	...	...	100	100 <sup>f</sup>
Yemen	84.8	...	2008	14.1 <sup>e</sup>	14.5 <sup>e</sup>	10.5 <sup>e</sup>	23.0	35.0	11.0	55	53

# Health status (mortality)

Country	Neonatal	Infant	Under-5	Maternal mortality ratio	Age-standardized mortality rates by main cause, 2012			Mortality between ages 30 and 70 from cardiovascular disease, cancer, diabetes, chronic respiratory disease, 2012	Mortality rate due to road traffic injuries		
	Mortality rate per 1000 live births, UN-IGME 2013 estimates			Per 100 000 live births, UN-MMEIG 2013 estimate	Per 100 000 population				Reported	WHO estimate, 2010	
									Per 100 000 population		
	R	R	R	R	Communicable diseases	Noncommunicable diseases	Injuries		%	R	Y
Afghanistan	36.3	70.2	97.3	400	363	846	169	31	4.6	2013	19.8
Bahrain	2.3	5.2	6.1	22	48	506	34	13	6.7	2012	10.5
Djibouti	31.2	57.4	69.6	230	626	631	106	19	...	...	...
Egypt	11.8	18.6	21.8	45	74	782	33	25	7.9	2013	13.2
Iran, Islamic Republic of	10.3	14.4	16.8	23	56	569	75	17	23.3 <sup>h</sup>	2013	34.1
Iraq	18.7	28.0	34.0	67	87	715	128	24	17.9	2013	31.5
Jordan	11.2	16.0	18.7	50	53	640	53	20	11.7	2013	22.9
Kuwait	4.7	8.1	9.5	14	82	406	25	12	12.8	2012	16.5
Lebanon	5.2	7.8	9.1	16	30	385	41	12	...	...	22.3
Libya	8.7	12.4	14.5	15	53	550	63	18	60.1	2013	...
Morocco	17.9	26.1	30.4	120	...	708	47	13	11.6	2013	18
Oman	6.6	9.8	11.4	11	84	478	53	18	23.6	2013	30.4
Pakistan	42.0	69.0	85.5	170	296	669	99	21	...	...	17.4
occupied Palestinian territory	12.2	18.6	21.8	47	...	...	...	21	4.9 <sup>i</sup>	2013	3.2
Qatar	4.3	7.0	8.2	6	28	407	41	14	13.7	2013	14.0
Saudi Arabia	8.8	13.4	15.5	16	71	549	41	17	25.5	2013	24.8
Somalia	46.2	89.8	145.6	850	927	551	188	19	...	...	...
Sudan	29.9	51.2	76.6	360	496	551	134	17	6.5	2013	25.1
Syrian Arab Republic	7.9	11.9	14.6	49	41	573	308	19	9.2	2010	22.9
Tunisia	9.0	13.1	15.2	46	65	509	39	17	13.8	2013	18.8
United Arab Emirates	4.8	7.0	8.2	8	36	547	32	19	6.5	2013	12.7
Yemen	24.3	40.4	51.3	270	515	627	84	23	...	...	23.7



# Health status (morbidity, 2013)

Country	Cancer (all types)	Tuberculosis <sup>k</sup>	HIV		Malaria		Measles
	Incidence <sup>g</sup>	Case notification	Estimated number of new infections	Number of newly reported cases	Incidence of confirmed cases	Total number of reported cases	Incidence
	Rate per 100 000 population		N	N	Rate per 1000 population		Rate per 1000 000 population
	R	R			R	N	R
Afghanistan	...	189	605	162 <sup>a</sup>	1.8	319 742	16.2
Bahrain	122.4	18	...	...	...	233 <sup>al</sup>	0.0
Djibouti	...	619	<200	...	2.0	1 687	22.0 <sup>b</sup>
Egypt	152.0	16	1 100	626 <sup>a</sup>	...	262 <sup>l</sup>	5.1
Iran, Islamic Republic of	...	21	7 800	1 588 <sup>b</sup>	0.6 <sup>m</sup>	1 373 <sup>m</sup>	1.6
Iraq	135.3	25	...	21 <sup>a</sup>	...	8 <sup>l</sup>	21.1
Jordan	155.4	6	...	16 <sup>a</sup>	...	56 <sup>l</sup>	19.5
Kuwait	102.1	26	...	25 <sup>b</sup>	...	291 <sup>l</sup>	17.3
Lebanon	197.4	16	...	109 <sup>b</sup>	...	133 <sup>l</sup>	410.7
Libya	124.1	40	...	802	...	88 <sup>al</sup>	28.2
Morocco	117.8	104	3 000	753 <sup>b</sup>	...	314 <sup>l</sup>	1.9
Oman	82.1	11	...	115 <sup>a</sup>	...	1 451 <sup>n</sup>	0.0
Pakistan	111.8	164	14 457	5 <sup>a</sup>	1.5	3 472 727	45.3
occupied Palestinian territory	...	5	...	5 <sup>a</sup>	...	0 <sup>a</sup>	0.0
Qatar	108.8	40	...	...	...	7 281	39.2
Saudi Arabia	91.1	14	...	394 <sup>b</sup>	0.02 <sup>m</sup>	2 513 <sup>m</sup>	8.8
Somalia	...	285	3 300	72 <sup>a</sup>	1.9 <sup>a</sup>	59 709	25.9
Sudan	91.1	108	5 200	353 <sup>a</sup>	15.2 <sup>a</sup>	989 946	85.9
Syrian Arab Republic	145.9	17	...	37 <sup>a</sup>	...	221	35.0
Tunisia	110.6	32	<1000	73 <sup>b</sup>	...	68 <sup>a</sup>	1.5
United Arab Emirates	92.5	2	...	...	...	4 380 <sup>l</sup>	37.4
Yemen	80.4	48	<1000	261 <sup>a</sup>	5.0	149 451	17.5

# Health financing

Country	Per capita total expenditure on health <sup>D</sup> US\$ exchange rate	Out-of-pocket expenditure as % of total health expenditure <sup>D</sup>	General government expenditure on health as % of general government expenditure <sup>D</sup>	Y	Population with catastrophic health expenditure	Population impoverished due to out-of-pocket health expenditure	Y
Afghanistan	51	74.4	7.1	2012	...	...	...
Bahrain	895	16.5	9.6	2012	...	...	...
Djibouti	129	40.0	14.1	2012	...	...	...
Egypt	152	59.6	5.8	2012	...	...	...
Iran, Islamic Republic of	490	52.5	15.4	2012	3.0	...	2010
Iraq	226	46.4	4.4	2012	...	...	...
Jordan	388	28.5	17.8	2012	...	...	...
Kuwait	1 428	15.8	5.6	2012	...	...	...
Lebanon	650	38.6	6.6	2012	...	...	...
Libya	578	22.7	6.9	2012	...	...	...
Morocco	190	58.8	6.0	2012	...	...	...
Oman	690	12.0	5.5	2012	2.6	1.00	2008
Pakistan	34	54.8	4.7	2012	...	...	...
occupied Palestinian territory	248	37.0	10.0	2012	...	...	...
Qatar	2 029	8.5	5.3	2012	...	...	...
Saudi Arabia	795	18.7	5.7	2012	...	...	...
Somalia	...	...	...	...	...	...	...
Sudan	115	73.7	10.6	2012	7.9	...	2012
Syrian Arab Republic	105	53.9	5.6	2012	...	..	...
Tunisia	297	35.5	13.3	2012	1.8	1.08	2010
United Arab Emirates	1 343	20.4	9.3	2012	...	...	...
Yemen	71	71.7	4.0	2012	...	...	...

# Health workforce

Country	Density of personnel per 10 000 population					Density of registered recent graduates of health profession educational institutions per 100 000 population				
	Physicians	Nursing and midwifery	Dentists	Pharmacists	Y	Physicians	Nursing and midwifery	Dentists	Pharmacists	Y
Afghanistan	2.9	3.6	0.1	0.3	2012	...	...	...	...	...
Bahrain	27.9	51.3	4.5	6.2	2012	...	...	...	...	...
Djibouti	2.1	5.1	0.2	2.2	2010	...	...	...	...	...
Egypt	8.5	14.3	1.6	3.0	2013	...	...	...	...	...
Iran, Islamic Republic of	15.2	15.7	3.5	2.3	2013	...	...	...	...	...
Iraq	8.8	19.5	2.1	2.2	2013	0.5	0.6	0.9	0.1	2013
Jordan	28.6	48.6	10.4	17.8	2013	...	...	...	...	...
Kuwait	27.0	56.0	5.0	6.1	2012	...	...	...	...	...
Lebanon	31.9	33.1	12.6	16.8	2013	...	...	...	...	...
Libya	20.0	67.0	6.0	6.0	2012	...	...	...	...	...
Morocco	6.4	9.0	1.4	2.7 <sup>b</sup>	2013	...	...	...	...	...
Oman	19.9	45.7	2.3	4.6	2013	1.0	5.0	0.2		2012
Pakistan	8.0	6.0	1.0	1.4	2011	...	...	...	...	...
occupied Palestinian territory	23.5	25.0	6.3	12.9	2013	...	...	...	...	...
Qatar	25.3	58.1	9.7	6.3	2012	2.0	1.0	0.0	2.0	2012
Saudi Arabia	26.8	103.0	4.2	7.3	2013	6.1	1.6	1.3	2.3	2011
Somalia	0.3	0.8	...	...	2009	...	...	...	...	...
Sudan	4.2	9.5	0.1	1.5	2013	...	...	...	...	...
Syrian Arab Republic	15.8	19.2	7.2	9.3	2012	2.0		1.0	1.0	2010
Tunisia	16.8	32.5 <sup>b</sup>	3.9	2.3	2013	...	...	...	...	...
United Arab Emirates	17.8	33.6	4.5	4.6	2012	...	...	...	...	...
Yemen	3.0	7.2	1.0	1.1	2013	...	...	...	...	...

# Service delivery

Country	Medicines and medical devices, 2013								Density of primary health care facilities	Density of inpatient beds (hospitals)	Y	Surgical wound infection		Annual outpatient visits per capita	
	Availability of selected essential medicines in health facilities		Density per million population of selected medical devices in public and private health facilities									Per 10 000 population		%	Y
	Public	Private	Computed Tomography	Radiotherapy	Magnetic Resonance Imaging	Mammographs, 2010	Digital Subtraction Angiography	Lithotriptors	R	R					
Afghanistan	...	...	0.2	...	0.1	0.0	...	...	1.0	5.3 <sup>b</sup>	2012	...	...	...	...
Bahrain	...	...	...	...	...	...	...	...	0.2	20.8	2011	...	...	...	...
Djibouti	...	...	...	...	...	...	...	...	0.5	14.2	2010	...	...	2.6	2013
Egypt	...	...	...	0.8	...	...	...	...	0.6	5.2	2012	...	...	...	...
Iran, Islamic Republic of	96.7	96.7	...	0.9	...	...	...	...	3.2 <sup>a</sup>	15.0	2013	...	...	...	...
Iraq	...	...	2.2	0.2	1.6	37.7	...	...	0.8	13.0	2013	...	...	...	...
Jordan	27.8 <sup>a</sup>	80.0 <sup>a</sup>	5.5	0.8	2.1	166.1	...	...	2.3	18.0	2013	...	...	3.0	2010
Kuwait	...	...	...	1.2	...	...	...	...	1.0	22.0	2012	...	...	0.7	2012
Lebanon	75.4	87.2	25.1	1.9	8.3	380.0	...	...	2.3 <sup>d</sup>	28.6	2013	...	...	6.2	2013
Libya	...	...	9.7	1.0	5.2	...	...	...	2.6	37.0	2010	...	...	...	...
Morocco	...	52.5	1.2	0.4	0.4	20.1	...	...	0.8	8.5	2011	...	...	1.0	2013
Oman	96.7 <sup>b</sup>	70.3 <sup>b</sup>	6.9	0.6	4.4	94.1	...	...	0.8 <sup>a</sup>	17.1	2013	...	...	4.4	2013
Pakistan	...	...	0.3	0.1	0.2	1.8	...	...	2.0	6.0	2011	...	...	4.6	2013
occupied Palestinian territory	...	...	...	...	...	...	...	...	1.7	12.5	2013	...	...	0.2	2013
Qatar	...	...	8.3	0.9	9.2	284.6	...	...	2.0	14.0	2012	...	...	...	...
Saudi Arabia	...	...	3.8	0.1	1.0	45.4	...	...	0.8	22.0	2013	...	...	1.2	2011
Somalia	...	...	...	...	...	...	...	...	1.9	8.7 <sup>b</sup>	2013	...	...	...	...
Sudan	49.3	69.5	1.1	0.2	0.3	9.7	...	...	1.0	8.2	2011	...	...	0.5	2012
Syrian Arab Republic	93.0	98.2	...	0.3	...	...	...	...	0.9	15.2	2012	...	...	...	...
Tunisia	70.0	80 <sup>a</sup>	8.9	1.6	2.0	27.1	...	...	5.5	21.2 <sup>b</sup>	2012	6.6	2012	...	...
United Arab Emirates	61.1 <sup>b</sup>	73.9 <sup>b</sup>	...	0.6	...	...	...	...	0.1	11.5	2012	...	...	3.8	...
Yemen	...	...	3.6	0.1	1.1	33.9	...	...	2.0	6.7	2013	...	...	...	...

# Coverage of selected interventions

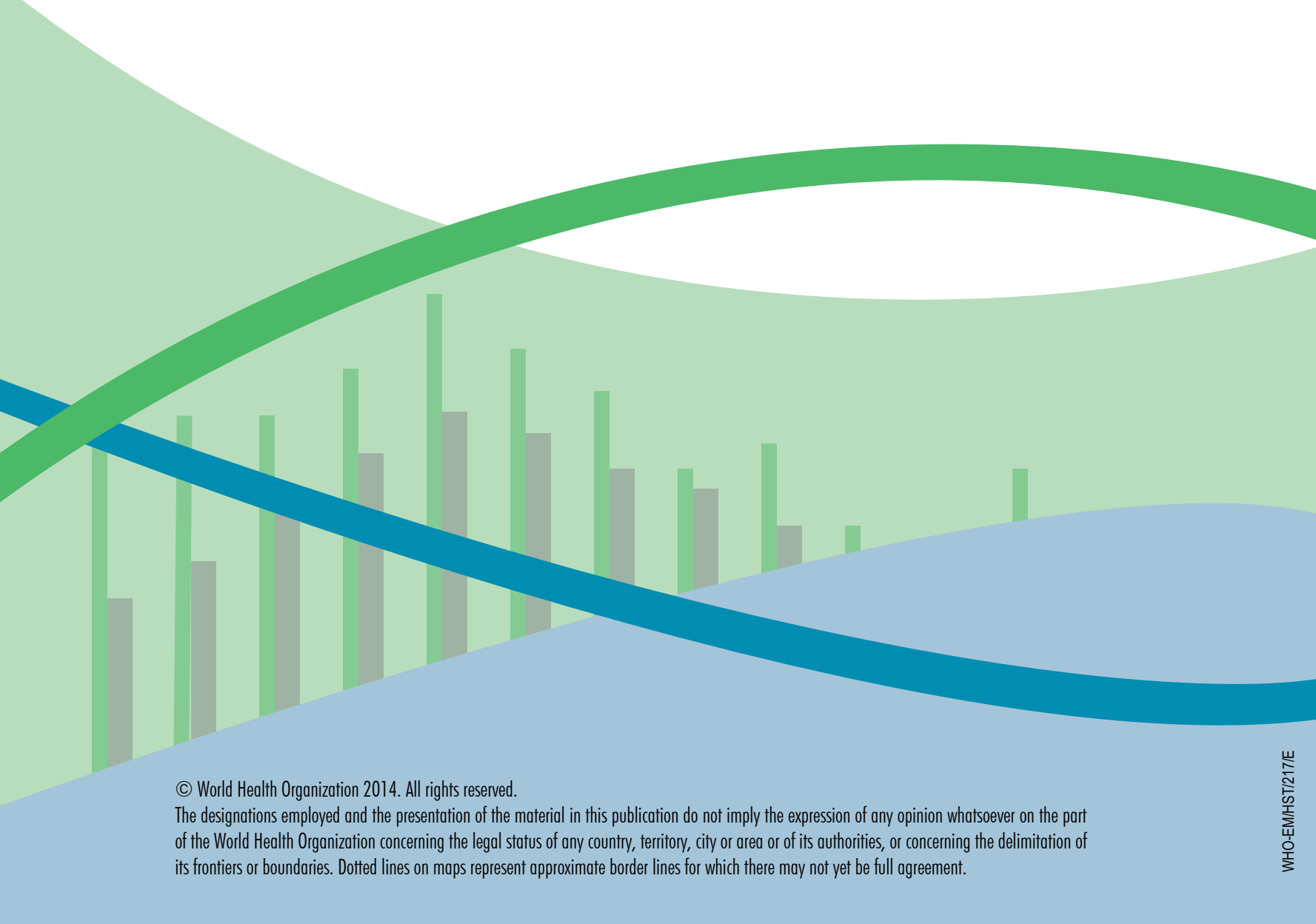
Country	Needs for contraception satisfied (UN Population division estimate, 2013)	Antenatal care coverage (1 + visits)	Antenatal care coverage (4 + visits)	Skilled birth attendance	Y	Children under 5 with diarrhoea receiving oral rehydration therapy		DPT3/pentavalent vaccination coverage among children under 1 year, 2013	Measles immunization coverage, 2013	Service coverage for severe mental disorders	
	%	%	%	%		%	Y	%	%	%	Y
Afghanistan	49.1	51.0	9.9	40.0	2012	70.1	2011	90.0	82.0	...	...
Bahrain	84.9	100.0	...	99.8	2012	...	...	99.0	100.0	...	...
Djibouti	40.7	73.0	...	40.0	2011	...	...	82.0	80.0	...	...
Egypt	84.7	51.3	...	79.0 <sup>e</sup>	2013	28.4	2008	97.0	96.0	...	...
Iran, Islamic Republic of	92.1	97.2	88.6	96.4	2010	...	...	98.0	98.0	99.2	2012
Iraq	77.8	52.0	34.0	87.7	2013	34.4	2011	78.0	77.0	37.0	2013
Jordan	83.5	99.0	...	100.0	2012	27.8	2012	98.0	97.0	...	...
Kuwait	77.6	100.0 <sup>c</sup>	...	100.0	2012	...	...	98.8	99.8	...	...
Lebanon	82.6	...	...	...	...	100.0	...	98.0	99.0	43.0	2010
Libya	69.6	...	...	99.9	2010	...	...	98.0 <sup>d</sup>	98.0 <sup>d</sup>	...	...
Morocco	87.0	77.1	42.6	73.6	2011	22.1	2011	99.0	99.0	...	...
Oman	54.8	99.1	96.4 <sup>e</sup>	98.6	2013	...	...	98.0	100.0	...	...
Pakistan	63.2	74.0	...	52.1	2013	41.8	2013	66.0	61.0	...	...
occupied Palestinian territory	...	100.0	...	100.0	2013	...	...	99.4	99.7	87.8	2013
Qatar	74.1	100.0 <sup>b</sup>	85.0	100.0	2012	69.0	2012	100.0	100.0	...	...
Saudi Arabia	59.5	98.0	82.3	98.0	2013	...	...	98.0	98.0	...	...
Somalia	40.8	40.0	...	44.0	2011	...	...	26.0	29.0	...	...
Sudan	33.4	74.0	...	72.5	2010	52.0	2010	93.0	85.0	...	...
Syrian Arab Republic	78.0	87.7	...	96.0	2009	...	...	60.0	83.0	...	...
Tunisia	85.2	98.1	85.1	98.6	2012	48.4	2012	98.0	94.3	...	...
United Arab Emirates	69.7	100.0 <sup>b</sup>	100.0 <sup>b</sup>	99.9	2013	...	...	100.0 <sup>d</sup>	100.0 <sup>d</sup>	...	...
Yemen	58.8	60.0	...	44.7	2013	27.8	2013	88.0	78.0	...	...

# Coverage of selected interventions

Country	Treatment success rate of new bacteriologically confirmed tuberculosis cases <sup>k</sup> , 2012	Suspected malaria cases having a diagnostic test	Individuals in malaria endemic areas who slept under an ITN the previous night	Y	Adults and children currently receiving ARV therapy among all adults and children living with HIV, estimates 2013	Key populations at higher risk who have received an HIV test in the past 12 months and know their results <sup>l</sup>			
						PWID	SW	MSM	Y
Afghanistan	92.0	66.5	30.6 <sup>b</sup>	2013	5.0	22.5	5.9	17.4	2013
Bahrain	44.0	100.0	...	2012	...	...	...	...	...
Djibouti	31.0	...	13.0	2009	28.0	...	100.0	...	2011
Egypt	87.0	100.0	...	2012	16.0	...	1.1	56.8	2011
Iran, Islamic Republic of	87.0	100.0	57.0	2013	6.0	24.8	20.0 <sup>d</sup>	...	2011
Iraq	89.0	100.0	...	2013	...	...	...	...	...
Jordan	90.0	100.0	...	2013	...	...	...	...	...
Kuwait	91.0	...	...	...	...	...	...	...	...
Lebanon	93.0	...	...	...	...	100.0	64.18 <sup>b</sup>	38.1 <sup>a</sup>	2013
Libya	60.0	100.0	...	2012	...	...	...	45.6	2012
Morocco	89.0	100.0	...	2013	21.0	9.7	25.5	31.0	2011
Oman	97.0	100.0	...	2013	...	...	...	...	...
Pakistan	91.0	58.8	34.8	2013	6.0	9.1	8.0	...	2011
occupied Palestinian territory	100.0	...	...	2013	...	...	...	...	...
Qatar	48.0	100.0	...	2011	...	...	...	...	...
Saudi Arabia	64.0	100.0	...	2013	...	...	...	...	...
Somalia	88.0	62.0	...	2011	5.0	...	...	...	...
Sudan	75.0	...	14.6	2012	7.0	...	9.0	4.6	2013
Syrian Arab Republic	80.0	100.0	...	2013	...	27.1	...	...	...
Tunisia	89.0	...	...	...	16.0	19.5	13.4	15.1	2011
United Arab Emirates	76.0	100.0	...	2013	...	...	...	...	...
Yemen	88.0	95.0	7.1	2013	15.0	...	...	27.9	2011

# Notes

- a 2012
  - b 2011
  - c 2010
  - d 2009
  - e 2008
  - f 2013 data
  - g Age standardized
  - h Calendar year 1 March 2013-28 February 2014
  - i West Bank only
  - k Source: Global Tuberculosis Report 2013 ([http://apps.who.int/iris/bitstream/10665/91355/1/9789241564656\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/91355/1/9789241564656_eng.pdf))
  - l Imported cases; no local transmission
  - m Calculated for the reported local cases per 1000 population at risk
  - n Of which locally transmitted cases were 11 (Oman) and 4 (Tunisia)
  - p Source: WHO global health expenditure online database (<http://apps.who.int/nha/database>)
  - q Global AIDS Response Progress Reporting, 2014  
([http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR\\_2014\\_guidelines\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/document/2014/GARPR_2014_guidelines_en.pdf))
  - Y Reference year for the data provided
- ... Not available for 2008-2012 or not reported
- UN-IGME:** United Nations Inter-agency Group for Child Mortality Estimation
- UN-MMEIG:** United Nations Maternal Mortality Estimation Inter-Agency Group
- PWID:** People who inject drugs
- SW:** Sex workers
- MSM:** Men who have sex with men



© World Health Organization 2014. All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.