

# 2.14 Health expenditure, services, and use

	Health expenditure		Health expenditure per capita		Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita	
	Public % of GDP	Private % of GDP	Total % of GDP	PPP \$	\$	per pe	1,000 eople	per pe	1,000 ople	% of population	days	
	1990-98ª	1990-98ª	1990-98 <sup>a,b</sup>	1990-98ª	1990-98ª	1980	1990–98 <sup>a</sup>	1980	1990-98ª	1990-98ª	1990–98ª	1990-98ª
Albania	2.7	7.8	10.5	282	73	••	1.4		3.2	••	13	2
Algeria	3.3	1.3	4.6	217	68	••	0.8	••	2.1	••	••	••
Angola	3.9	••	••	••	••		0.0 <sup>c</sup>		1.3	••		
Argentina	4.0	5.6	9.6	1,147	792	••	2.7	••	3.3	••	••	••
Armenia	3.1	4.2	7.8	147	27	3.5	3.0	8.4	7.6	8	15	3
Australia	5.5	2.8	8.4	1,866	1,842	1.8	2.5		8.5	17	16	7
Austria	6.0	2.2	8.3	1,896	2,108	2.3	2.8	11.2	9.2	25	11	6
Azerbaijan	1.2	5.9	7.2	146	36	3.4	3.8	9.7	9.7	6	18	1
Bangladesn	1.6	2.0	3.5	45	12	0.1	0.2	12.5	12.3			
Polgium	4.9	1.1	7.6	1 750	1 910	3.4 2.5	4.3 2.4	12.5	12.2	20	10 11	0
Benin	1.6	0.9	2.0	10	1,012 Q	2.5	0.4	<i>3.4</i> 1.5	0.2	20	<u> </u>	0
Bolivia	1.0	1.6	2.0	60	28	0.1	13	1.5	1 7	••	••	••
Bosnia and Herzegovina	1.1	1.0	2.0	00	20	0.0	0.5	••	1.8	••	 15	••
Botswana		 1 6	43		 133		0.0		1.0	••	10	••
Brazil	3.4	4.0	7.3	503	359	0.8	1.3		3.1	 0 d		
Bulgaria	3.2	0.8	4.0	193	59	2.5	3.5	11.1	10.6	18	14	5
Burkina Faso	1.2	2.7	3.9	34	9	0.0	0.0 °		1.4	2	3	0 d
Burundi	0.6	3.0	3.6	21	5		0.1		0.7			
Cambodia	0.6	6.3	6.9	87	17		0.1		2.1			
Cameroon	1.0	4.0	5.0	83	31		0.1		2.6			
Canada	6.4	2.8	9.2	2,158	1,855	1.8	2.1		4.2	13	12	7
Central African Republic	1.9	0.9	2.8	31	••	0.0 <sup>c</sup>	0.1	1.6	0.9	••	••	••
Chad	2.4	0.6	3.1	26	7		0.0 <sup>c</sup>		0.7			
Chile	2.4	1.5	3.9	344	201		1.1	3.4	2.7	••	••	••
China	2.0	2.6	4.5	142	33	0.9	2.0	2.0	2.9	4	13	••
Hong Kong, China	2.1	2.8	5.0	1,121	1,134	0.8	1.3	9.1	••	2		1
Colombia	4.9	2.4	9.4	594	256	••	1.1	1.6	1.5	••	••	••
Congo, Dem. Rep.	1.2	1.3	2.5	••	••	••	0.1		1.4	••	••	••
Congo, Rep.	1.8	3.2	5.0	62	42	0.1	0.3		3.4	••		••
Costa Rica	6.9	2.1	9.0	542	268	••	1.4	3.3	1.9	••	••	••
Côte d'Ivoire	1.4	2.6	3.7	66	27	••	0.1		0.8		••	••
Croatia	8.1	1.6	9.6	643	431		2.0	••	5.9	12	••	••
	8.2					1.4	5.3	••	5.1			
	6.4	0.6	7.0	4 024	384		2.9	••	9.2	22	12	15
Deminican Republic	0.7	1.3	8.0	1,931	2,576	2.4	2.9		4.7	20		5
Foundar	2.5	3.0 2.4	0.Z	234	91 74	••	2.2		1.0	••	••	••
Eduat Arab Ren	1.9	2.4	3.8	1240	/4		2.1	2.0	2.0	 2		
El Salvador	2.6	2.0 4.4	7.0	282	136	0.3	1.0	2.0	1.6	5	0	4
Fritrea	2.9	0.9	2.0	15	100	0.0	0.0 °	••	1.0	••	••	••
Estonia	5.1	1.4	6.4	492	230	4.2	3.1		7.4	 18	 9	
Ethiopia	1.7	2.4	4.1	24	4	0.0 °	0.0 °	0.3	0.2			
Finland	5.7	1.8	7.4	1,520	1,736	1.9	2.8	15.5	9.2	26	12	4
France	7.1	2.5	9.6	2,026	2,287	2.2	2.9		8.7	23	11	6
Gabon	0.6	••				0.5	0.2		3.2			
Gambia, The	1.4	1.7	3.1	46	11	••	0.0 <sup>c</sup>		0.6			
Georgia	0.7	4.0	4.7	156	46	4.8	3.8	10.7	4.8	5	13	2
Germany	8.3	2.5	10.7	2,364	2,727	2.2	3.4	••	9.6	21	14	6
Ghana	1.8	2.9	4.7	82	19	••	••	••	1.5	••	••	••
Greece	5.3	3.6	8.9	1,226	1,016	2.4	3.9	6.2	5.0	15	8	••
Guatemala	1.5	0.9	2.4	83	41		0.9		1.0		••	••
Guinea	1.2	1.0	2.2	43	13	0.0 °	0.2		0.6	••	••	••
Guinea-Bissau	1.1	••	••			0.1	0.2	1.8	1.5			
Haiti	1.3	2.1	3.4	47	17	0.1	0.2	0.7	0.7	••	••	••
Honduras	2.7	5.6	8.3	202	72	0.3	0.8	1.3	1.1	••	••	••



## Health expenditure, services, and use 2.14

	Health expenditure		Health expenditure per capita		Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita	
	Public Private Total		РРР		per 1,000		per 1,000		% of			
	% of GDP <b>1990–98</b> ª	% of GDP <b>1990–98</b> ª	% of GDP <b>1990–98<sup>a,b</sup></b>	\$ 1990–98ª	\$ 1990–98ª	pe 1980	eople 1990–98ª	ре <b>1980</b>	eople 1990–98ª	population 1990–98ª	days <b>1990–98</b> ª	1990-98ª
Hungary	4.1	2.0	6.4	638	290	2.5	3.4	9.1	9.1	24	11	15
India	0.6	4.1	5.2	73	18	0.4	0.4	0.8	0.8	••	••	••
Indonesia	0.6	0.7	1.3	38	6	0.1	0.2		0.7			
Iran, Islamic Rep.	1.7	2.5	4.3	216	93	0.3	0.9	1.5	1.6	••	••	••
Iraq		••	••	••		0.6	0.6	1.9	1.5	••	••	••
Ireland	4.9	1.5	6.3	1,293	1,333	1.3	2.1	9.7	3.7	16	7	
Israel	7.0	3.4	10.4	1,801	1,701	2.5	4.6	5.1	6.0			
Italy	5.3	2.3	7.6	1,539	1,511	1.3	5.5		6.5	16	10	••
Jamaica	2.3	2.4	4.7	158	116	0.4	1.3		2.1	••	••	••
Japan	5.9	1.4	7.1	1,757	2,379	1.4	1.8	11.3	16.2	9	44	16
Jordan	3.7	4.2	7.9	215	123	0.8	1.7	1.3	1.8	11	3	3
Kazakhstan	2.1	2.5	4.8	217	68	3.2	3.5	13.2	8.5	15	16	1
Kenya	2.2	1.0	1.0	10	3	0.1	0.0 <sup>c</sup>		1.6			
Korea, Dem. Rep.				••		2.5			••	••	••	••
Korea, Rep.	2.5	3.0	5.6	824	578	0.6	1.1	1.7	4.6	6	13	10
Kuwait	2.9	0.4	3.3	••	551	1.7	1.9	4.1	2.8	••	••	••
Kyrgyz Republic	2.7	0.4	3.1	71	11	2.9	3.1	12.0	9.5	21	15	1
Lao PDR	1.2	1.3	2.6	34	6		0.2		2.6	••	••	••
Latvia	4.0	2.4	6.4	366	168	4.1	3.4	13.7	10.3	21	14	4
Lebanon	3.0	7.0	10.0	594	361	1.7	2.8		2.7	14	4	••
Lesotho	3.7	2.4		••			0.1		••	••	••	••
Libya	••	••		••		1.3	1.3	4.8	4.3	••	••	••
Lithuania	7.2	1.0	8.3	533	240	3.9	3.9	12.1	9.6	24	12	7
Macedonia, FYR	7.8	0.8	7.5	••	171		2.3		5.2	10	15	3
Madagascar	1.1	1.0	2.1	••	5	0.1	0.3		0.9	••	••	••
Malawi	2.8	0.4	3.3	20	5	0.0	0.0 °		1.3	••		2
Malaysia	1.3	1.0	2.4	180	78	0.3	0.5	2.3	2.0	••		••
Mali	2.0	1.8	3.8	28	10	0.0	0.1		0.2	1	7	0 d
Mauritania	1.8	4.1	5.2	68	28	••	0.1		0.7	••		••
Mauritius	1.9	1.6	3.5	361	120	0.5	0.9	3.1	3.1	0 d		4
Mexico	2.8	1.9	4.7	369	201	0.9	1.2	••	1.2	6	4	2
Moldova	4.8	1.9	6.7	145	30	3.1	3.6	12.0	12.1	19	18	8
Mongolia	4.3	0.4	4.7	68	23	9.9	2.6	11.2	11.5	••	••	••
Morocco	1.3	2.7	4.0	140	49	0.1	0.5	1.2	1.0	3	3	••
Mozambique	2.1	••	••	••	••	0.0	••	1.1	0.9	••	••	••
Myanmar	0.2	0.8	1.0	••	58	0.2	0.3	0.9	0.6	••	••	••
Namibia	3.8	3.6	7.4	399	150	••	0.2		••	••	••	••
Nepal	1.3	4.2	5.5	58	11	0.0	0.0 °	0.2	0.2	••	••	••
Netherlands	6.1	2.3	8.5	1,874	1,988	2.1	2.6	12.5	11.3	11	33	5
New Zealand	5.9	1.7	7.6	1,357	1,310	1.6	2.1		6.1	14	7	••
Nicaragua	4.4	5.3	9.7	209	43	0.4	0.8	••	1.5			••
Niger	1.3						0.0 °		0.1	28	5	0 u
Nigeria	0.2	0.5	0.7	6	9	0.1	0.2	0.9	1./			••
Norway	6.2	1.3	7.5	1,996	2,616	1.9	2.5	15.0	15.0	15	10	4
Oman	2.1					0.5	1.3	1.6	2.2	9	4	4
Pakistan	0.9	3.0	3.9	65	18	0.3	0.6	0.6	0.7	••	••	3
Panama	6.0	1.7	7.6	402	253	1.0	1./		2.2	••	••	••
Papua New Guinea	2.6	0.6		( (	34	0.1	0.1	5.5	4.0	••	••	••
Paraguay	2.6	4.8	/.4	348	122	0.6	1.1	••	1.3	··		
Peru	2.2	3.4	5.6	240	141	0.7	0.9		1.5	1	6	2
Philippines	1.7	0.1	3.7	124	32	0.1	0.1	1.7	1.1			
Poland	4.2	1./	5.9	449	242	1.8	2.3	5.6	5.4	14	11	5
Portugal	4.7	3.2	1.9	1,142	803	2.0	3.0	••	4.1	11	10	3
Puerto Rico		6.5					1.8		3.3			••
Romania	2.9	1.8	4.2	192	65	1.5	1.8	8.8	1.6	18	10	4
Russian Federation	4.5	1.2	5.7	404	130	4.0	4.6	13.0	12.1	22	17	8



## 2.14 Health expenditure, services, and use

	Health expenditure			Health expenditure per capita		Physicians		Hospital beds		Inpatient admission rate	Average length of stay	Outpatient visits per capita
	Public % of GDP <b>1990–98</b> ª	Private % of GDP <b>1990–98</b> ª	Total % of GDP <b>1990-98<sup>a,b</sup></b>	PPP \$ <b>1990–98</b> ª	\$ 1990–98ª	per 1 per <b>1980</b>	1,000 ople <b>1990–98</b> ª	per pe <b>1980</b>	1,000 ople <b>1990–98</b> ª	% of population <b>1990–98</b> ª	days <b>1990–98</b> ª	1990-98ª
Rwanda	2.1		••			0.0 <sup>c</sup>	0.0 <sup>c</sup>	1.5	1.7			••
Saudi Arabia	6.4	1.6	8.0	844	584	0.5	1.7	1.5	2.3	11	11	1
Senegal	2.6	2.1	4.7	66	23	0.1	0.1		0.4	22	10	1
Sierra Leone	1.7	6.2	7.9	39	14	0.1		1.2				
Singapore	1.1	2.0	3.2	744	841	0.9	1.4	4.2	3.6	12	••	••
Slovak Republic	5.2	1.6	6.8	655	255		3.0		7.5	20	11	12
Slovenia	6.8	1.0	7.8	1,115	768		2.1	7.0	5.7	16	11	
South Africa	3.2	3.5	7.1	571	246		0.6				••	
Spain	5.6	1.8	7.4	1,182	1,001	2.8	4.2		3.9	10	11	
Sri Lanka	1.4	1.2	2.6	72	22	0.1	0.2	2.9	2.7	••	••	
Sudan		1.9		••	••	0.1	0.1	0.9	1.1	••	••	••
Sweden	7.2	1.4	8.6	1,773	2,220	2.2	3.1	14.8	5.6	18	8	3
Switzerland	7.1	3.0	10.0	2,573	3,616		3.2		20.8	15	••	11
Syrian Arab Republic		••		••	••	0.4	1.4	1.1	1.5	••	••	••
Tajikistan	6.6	0.1	5.9	67	8	2.4	2.1	10.0	8.8	16	15	••
Tanzania	1.3	••		••	••		0.0 <sup>c</sup>	1.4	0.9			••
Thailand	1.7	4.5	6.2	329	112	0.1	0.4	1.5	2.0			1
Тодо	1.1	2.1	3.2	46	11	0.1	0.1		1.5	••	••	••
Trinidad and Tobago	2.8	1.6	4.3	334	215	0.7	0.8		5.1			
Tunisia	3.0	2.9	5.9	320	118	0.3	0.7	2.1	1.7	8		••
Turkey	2.9	2.9	5.8	377	177	0.6	1.1	2.2	2.5	6	6	1
Turkmenistan	3.5	••		••	••	2.9	0.2	10.6	11.5	17	15	••
Uganda	1.8	2.9	4.7	50	14	0.0 °	0.0 <sup>c</sup>	1.5	0.9	••	••	••
Ukraine	4.1	1.4	5.4	179	54	3.7	4.5	12.5	11.8	20	17	10
United Arab Emirates	4.5	0.4	2.4	446	396	1.1	1.8	2.8	2.6	11	5	••
United Kingdom	5.9	1.0	6.8	1,391	1,480	1.6	1.6	9.3	4.5	23	10	6
United States	6.5	7.5	13.9	4,121	4,080	1.8	2.6	5.9	4.0	12	8	6
Uruguay	1.9	6.5	8.4	719	529	2.0	3.7		4.4	••	••	••
Uzbekistan	3.3	••	••	••	••	2.9	3.3	11.5	8.3	19	14	••
Venezuela, RB	3.0	4.5	7.5	426	205	0.8	2.4	0.3	1.5	••	••	••
Vietnam	0.4	3.9	4.3	••	16	0.2	0.4	3.5	3.8	7	8	3
West Bank and Gaza	4.9	3.7	8.6	••	81		0.5	••	1.2	9	3	4
Yemen, Rep.	2.1	3.0	5.0	38	18	0.1	0.2		0.7	••	••	••
Yugoslavia, FR (Serb./Mont.)		••		••	••		2.0		5.3	8	12	2
Zambia	2.3	1.8	4.1	33	14	0.1	0.1	3.5	••	••	••	••
Zimbabwe	3.1	3.3	6.4	191	31	0.2	0.1	3.1	0.5		••	••
World	2.5 w	29 w	55 w	561 w	483 w	10 м	v 15 w	34 1	N 33W	9 w	13 w	6 w
Low income	1.3	2.8	4.2	93	23	0.6	1.0	1.5	1.8	5	13	3
Evel China & India	1.3	2.0	3.1	35 76	1/	0.0	1.0	1.5	1 3	10	13	3
Middle income	3.1	2.0	5.1	384	199	 16	1.8	••	43	10	11	5
Lower middle income	3.0	2.0	53	275	102	2.0	2.0	7 2	+.3 5 1	15	13	6
Lower middle income	33	2.2	6.3	535	232	2.2 0.9	1 5	1.2	3.1	6	8	4
Low & middle income	1 9	2.0	4.6	182	75	0.0	1.0	27	2.5	7	12	
Fast Asia & Pacific	1 7	2.1	4.1	154	47	0.5	1.5	2.1	2.5	ι Δ	13	
Europe & Central Asia	4 0	<del>د</del> 1 R	5.8	355	138	3.0	3.3	10.4	89		14	
Latin America & Carib	3.3	±.0 3 3	6.6	<u>461</u>	284	0.0 0.8	1 5	10.4	23	-1 2	 	ງ ງ
Middle Fast & N Africa	2.3	2.5	0.0 4 R	-+01 227	20 <del>4</del> 117	0.0	1.0	 17	2.3 1 7	∠ 5	4 6	2
South Asia	∠.4 ∩ Ջ	∠.⊃ 2.7	4.0 1 Q	201 60	17	0.7	1.2 0 /	1.1 0.7	1.1 0.7	5	U	ა ი
Sub-Sabaran Africa	0.0	ی. ۱ ۹	4.0 2.0	09	22	0.3	0.4	0.1	0.7			ی ۱
	±.0 6.2	±.0 3.7	3.2 Q Q	2 505	2 585	 1 0	0.1 2.9	••	1.1 7 /	15	16	 و
Furone FMII	6.6	3.1 22	9.0 8 0	1 8/10	1 97/	1.3 01	2.0	••	7.9	19	12	6
	0.0	∠.১	0.3	1,042	1,314	∠.⊥	5.1	••	1.0	то	10	U

a. Data are for the most recent year available. b. Data may not sum to totals because of rounding and because of differences in the year for which the most recent data are available. c. Less than 0.05. d. Less than 0.5.

#### About the data

National health accounts track resource inputs to the health sector, including both public and private expenditures. In contrast with high-income countries, few developing countries have health accounts that are methodologically consistent with national accounting approaches. The difficulties in creating national health accounts go beyond data collection. Before beginning to establish a national health accounting system, a country needs to define the boundaries of the health care system and a taxonomy of health care delivery institutions. The accounting system should be comprehensive and standardized, providing not only accurate bookkeeping but also critical information on the equity and efficiency of health financing to inform health policymaking and health system reform.

The absence of consistent national health accounting systems in most developing countries makes crosscountry comparisons of health spending difficult. Records of private out-of-pocket expenditures are often lacking. And compiling estimates of public health expenditures is complicated in countries where state or provincial and local governments are involved in health care financing and delivery because the data on public spending often are not aggregated. The data in the table are the product of an effort to collect all available information on health expenditures from national and local government budgets, national accounts, household surveys, insurance publications, international donors, and existing tabulations.

Health service indicators (physicians and hospital beds per 1,000 people) and health utilization indicators (inpatient admission rates, average length of stay, and outpatient visits) come from a variety of sources (see Data sources). Data are lacking for many countries, and for others comparability is limited by differences in definitions. In estimates of health personnel, for example, some countries incorrectly include retired physicians (because deletions are made only periodically) or those working outside the health sector. There is no universally accepted definition of hospital beds. Moreover, figures on physicians and hospital beds are indicators of availability, not of quality or use. They do not show how well trained the physicians are or how well equipped the hospitals or medical centers are. And physicians and hospital beds tend to be concentrated in urban areas, so these indicators give only a partial view of health services available to the entire population.

Average length of stay in hospitals is an indicator of the efficiency of resource use. Longer stays may reflect a waste of resources if patients are kept in hospitals beyond the time medically required, inflating demand for hospital beds and increasing hospital costs. Aside from differences in cases and financing methods, crosscountry variations in average length of stay may result from differences in the role of hospitals. Many developing countries do not have separate extended care facilities, so hospitals become the source of both long-term and acute care. Other factors may also explain the variations. Data for some countries may not include all public and private hospitals. Admission rates may be overstated in some countries if outpatient surgeries are counted as hospital admissions. And in many countries outpatient visits, especially emergency visits, may result in double counting if a patient receives treatment in more than one department.

#### Table 2.14a

Health expenditure by aggregation method, 1990–98 % of GDP

	Unweighted average	Weighted by population	Weighted by GDP
World	5.6	5.5	9.2
Low income	4.0	4.2	4.2
Middle income	5.8	5.7	5.9
High income	6.8	9.8	9.4

Source: World Bank staff estimates.

Health expenditures for the world and for country income groups will vary—often substantially—depending on how they are aggregated. A population-weighted average of global health expenditures, which gives relatively large weights to such countries as China, India, and Indonesia—all of which spend little on health—is far smaller than a GDPweighted average, which gives the greatest weights to the largest economies.

Which aggregation method to use depends on the purpose. To show the percentage of global GDP spent on health, country data need to be weighted by GDP. To show the average percentage of GDP spent per country taking account of differences in population size, country data would need to be weighted by population. Unweighted averages would show the average percentage of GDP spent on health irrespective of the size of populations or economies.

### Definitions

· Public health expenditure consists of recurrent and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds. . Private health expenditure includes direct household (out-of-pocket) spending, private insurance, charitable donations, and direct service payments by private corporations. • Total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. . Physicians are defined as graduates of any faculty or school of medicine who are working in the country in any medical field (practice, teaching, research). • Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases beds for both acute and chronic care are included. · Inpatient admission rate is the percentage of the population admitted to hospitals during a year. • Average length of stay is the average duration of inpatient hospital admissions. • Outpatient visits per capita are the number of visits to health care facilities per capita, including repeat visits.

#### Data sources

Estimates of health expenditure come from the World Health Organization's (WHO) *World Health Report 2000* and from the Organisation for Economic Co-operation and Development for its member countries, supplemented by World Bank country and sector studies, including the Human Development Network's *Sector Strategy: Health, Nutrition, and Population* (World Bank 1997f). Data were also drawn from World Bank public expenditure reviews, the International Monetary Fund's Government Finance Statistics database, and other studies. The data on private expenditure are largely from household surveys and World Bank poverty assessments and sector studies. The data on physicians, hospital beds, and utilization of health services are from the WHO and OECD, supplemented by country data.