CHAPTER 5
CORE MODULE

5.1 Overview

This chapter is the background or foundational module. Whether you are planning to work through all the technical modules (Chapters 6–11) or only a subset, you should complete this core module to understand the basic background information about the country and its health system. Ideally, you would complete the core module before the in-country assessment and finalize it with additional information in-country.

The core module is divided into two components. Component 1 provides a basic overview of a country's economic and health status performance, through the analysis of data provided on the CD that accompanies this manual. Component 2 requires the use of the assessment tool to conduct analyses of different topics (such as background information on a country's political and economic environment, its health sector, donor involvement in health activities, and the general business environment) that are essential to understand before analyzing the technical modules (chapters 6–11). You will need to conduct document review, Internet research, and stakeholder interviews to complete Component 2.

Table 5.1 groups the indicators in this module by topic.

Table 5.1 Indicator Map—Core Module

Component	Topical Area	Indicator Numbers
Component 1	Population dynamics	1–3
	Reproductive health	4–7
	Mortality	8–11
	Income and inequity	12–17
Component 2	Political and macroeconomic environment	Not applicable—not an indicator-based assessment in this section
	Business environment and investment climate	
	Top causes of mortality and morbidity	
	Structure of the main ministries and private organizations involved in the health care system	
	Decentralization	
	Service delivery organization	
	Donor mapping	
	Donor coordination	

5.2 Component 1

Component 1 provides a rapid overview of a country's performance with regard to four economic and health indicators, which are presented and described below. The data for these indicators are mainly drawn from existing and publicly available databases from the World Bank and the World Health Organization (WHO), as well as from National Health Accounts (NHA). Data for all Component 1 indicators are provided in electronic format in the CD version of this manual (filename: Component 1 data). This file also contains the Component 1 data for the other technical modules.

Tip!

For each module, complete compilation of Component 1 indicators first, using data provided on the accompanying CD (see 5.2 for instructions).

You should first review and analyze the Component 1 data for this and the other modules before starting on Component 2. (See Box 5.1 for instructions on how to compile the data for the assessment country). Reviewing and analyzing component 1 data for all modules is particularly important if you are assessing only one or few of the modules, because the data will provide background information relevant to all areas of the health care system. (See annex 5A for an example of the summary table containing Component 1 data.)

In addition to analyzing Component 1 data for the country being assessed, you should compare these data to a peer group of countries to allow a comparison of the performance and health status of the country to that of another group of similar countries. You may want to compare the performance of the focal country against peer groups, selected according to the following criteria:[1]

- *Region:* East Asia and Pacific, Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa (MENA), South Asia, Sub-Saharan Africa

Box 5.1
Steps for Component 1 Assessment

1. **On the CD provided with this manual, open the data file titled "Component 1 data."**
2. **Review the instructions on the first sheet titled "Introduction."**
3. **Go to the second spreadsheet titled "Summary table."**
   - In the column "Country level data" (column C), select the assessment country from the drop-down menu in the highlighted yellow cell.
   - Once you have selected the country, all the Component 1 data (and year of the data) for every module automatically will be included in the table. The data for the regional and income comparators also will be automatically computed. (See Annex 5A for an example of the summary table.)
4. **Review and analyze the data for a rapid assessment of the country's health system.** Note that each module (chapters 5–11) provides definitions for the Component 1 indicators and descriptions for how to interpret the indicators for an assessment.

Note: Data were compiled in August 2006. For the latest data (or if you are missing the CD), you may need to access the original sources listed for each Component 1 indicator in each chapter.

[1] These are the criteria used by the World Bank; in addition to the Component 1 data on the CD, a classification of countries by each criteria can be found at <http://www.worldbank.org/data/countryclass/classgroups.htm>.

- *Income:* Low-income economies, lower-middle-income economies, upper-middle-income economies, high-income economies, high-income Organisation for Economic Co-operation and Development (OECD) members

Sections 5.2.1 through 5.2.4 list and describe Component 1 indicators for this core module, organized by the following topics—

- Section 5.2.1 Population Dynamics
- Section 5.2.2 Reproductive Health
- Section 5.2.3 Mortality
- Section 5.2.4 Income and Inequality

Section 5.2.1 Population Dynamics

1. Population, total	
Definition and rationale	Total population of a country including all residents regardless of their legal status or citizenship—except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin This indicator is indicative of the magnitude of general health care needs of a country.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

2. Population growth (annual %)	
Definition and rationale	The increase in a country's population over a year, expressed as a percentage of the population at the beginning of that period; this indicator reflects the number of births and deaths during the period and the number of people migrating into and out of a country Rapid population growth can inhibit a country's ability to raise the standard of living when the need for food, health care, education, houses, land, jobs, and energy increases, especially if government revenues do not increase at the same rate.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

3. Rural population (% of total) **Urban population (% of total)**	
Definition and rationale	The percentage of the total population living in urban and rural areas; the urban population is the midyear population of areas defined as urban in each country and reported to the United Nations (UN) The distribution of the population in rural and urban areas gives an indication of the level of urbanization of a country. Urbanization can improve access to public services such as education, health care, and cultural facilities, but it can also lead to adverse environmental effects that require policy responses.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

5.2.2 Reproductive Health

4. Contraceptive prevalence (% of women aged 15–49)	
Definition and rationale	The percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception The measure indicates the extent of people's conscious efforts to control their fertility. Increased contraceptive prevalence is, in general, the single most important proximate determinant of intercountry differences in fertility and of ongoing fertility declines in developing countries. Contraceptive prevalence can also be regarded as an indirect indicator of progress in providing access to reproductive health services including family planning (one of the eight elements of primary health care) (UNICEF 2001).
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

5. Fertility rate, total (births per woman)	
Definition and rationale	The number of children who would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with prevailing age-specific fertility rates If the fertility rate is high, the contraceptive prevalence will likely be low. If data show inconsistencies (e.g., a high fertility rate coupled with a high contraceptive rate), investigate the sources of these inconsistencies.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

6. Pregnant women who received 1+ antenatal care visits (%) **Pregnant women who received 4+ antenatal care visits (%)**	
Definition and rationale	The proportion of women who had one or more antenatal care contacts during their last pregnancy in the five years before the most recent survey was conducted in that country, as well as the proportion of women who had four or more visits This indicator shows the utilization of reproductive health services for women; availability and accessibility are key components. If these rates are low, then access might be constrained because such services are not available, not promoted, or associated with high out-of-pocket expenditures (limiting the access to low-income households). Low utilization levels may also reflect weak demand for antenatal care.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

7. Prevalence of HIV, total (% of population aged 15–49)	
Definition and rationale	Percentage of adults who are infected with HIV A high prevalence of HIV/AIDS indicates a high burden on the health care system (in terms of infrastructure, staff, financing needs, and other factors.)
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

5.2.3 Mortality

8. Life expectancy at birth, total (years)	
Definition and rationale	The number of years a newborn would live if prevailing patterns of mortality at the time of birth were to stay the same throughout his or her lifetime Life expectancy at birth is also a measure of overall health status of the population and the quality of life in a country.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

9. Mortality rate, infant (per 1,000 live births)	
Definition and rationale	The number of infants who die before reaching one year of age, expressed per 1,000 live births in a given year Infant mortality rate is a measure of overall quality of life in a country. It can also show the accessibility and availability of antenatal and postnatal care.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

10. Mortality rate, under age 5 (per 1,000)	
Definition and rationale	The probability that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates, expressed as a rate per 1,000 Child mortality, like infant mortality, is closely linked to poverty. Improvements in public health services are key, including safe water and better sanitation. Education, especially for girls and mothers, will save children's lives.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

11. Maternal mortality ratio (per 100,000 live births)	
Definition and rationale	The number of maternal deaths that occur during pregnancy and childbirth per 100,000 live births This indicator is a measure of the likelihood that a pregnant woman will die from maternal causes and of the availability and accessibility of reproductive health services, particularly of the extent of use of modern delivery care.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

5.2.4 Income and Inequality

12. GDP per capita (constant 2,000 USD)	
Definition and rationale	Gross domestic product (GDP) divided by midyear population, in constant U.S. dollars (USD) This indicator is a measure of the overall economic wealth of a country (but not indicative of individual well-being because the degree of income inequality affects the association of overall and individual wealth). In general (but not always), higher GDP per capita is associated with better availability and quality of health care and better population health.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

13. GDP growth (annual %)	
Definition and rationale	Annual percentage growth rate of GDP at market prices based on constant local currency GDP growth compared to population growth provides a rough indication of whether the resources potentially available for health are increasing or decreasing.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

14. Per capita total expenditure on health at international dollar rate	
Definition and rationale	Total health expenditure is the sum of public and private health expenditure, including donors This total is derived by dividing per capita total health expenditure (THE) in local currency units by an estimate of the purchasing power parity (PPP) of the local currency compared to USD, that is, a rate or measure that minimizes the consequences of differences in price levels existing between countries. Higher THE per capita is generally (but not always) associated with better availability and quality of health care.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

15. Private expenditure on health as % of total expenditure on health	
Definition and rationale	Private expenditure on health comprises household out-of-pocket spending plus the outlays of insurers and third-party payers (other than social security), mandated employer health services and other enterprises providing health services, nonprofit institutions and nongovernmental organizations (NGOs) financing health care, private investments in medical care facilities This figure will indicate the involvement of the private sector in the delivery of health care because it represents the portion of health care services that is managed by the private sector.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

16. Out-of-pocket expenditure as % of private expenditure on health	
Definition and rationale	The direct outlay by households including gratuities and payments-in-kind made to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or to the enhancement of the health status of individuals or population groups; includes household payments to public services, nonprofit institutions, or NGOs, and excludes payments made by enterprises that deliver medical and paramedical benefits, mandated by law or not, to their employees This indicator provides information on the burden of health care financing on households. In most developing countries, out-of-pocket spending is the largest share of private health expenditures. High out-of-pocket spending at the point of service has negative implications for equity and access.
Suggested data source	WHO (2006). *The World Health Report 2006* <www.who.int> or most recent.

17. GINI index	
Definition and rationale	A measure of income and wealth inequalities among a population and the extent to which the distribution of income (or consumption) among individuals or households within a country deviates from a perfectly equal distribution A Lorenz curve plots the cumulative percentages of total income received against the cumulative percent of recipients, starting with the poorest individual or household. The GINI index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the total area under the line. A value of 0 represents perfect income equality, a value of 100 represents perfect inequality. This indicator is particularly relevant to the equity component of development. Income or resource distribution has direct consequences on the poverty rate of a country or region.
Suggested data source	World Bank (2006b). *World Development Indicators* <www.worldbank.org> or most recent.

5.3 Component 2

This section focuses on developing basic understanding and a profile of a country's health system and related country background characteristics. The topics covered include the following—

- Section 5.3.1 Political and Macroeconomic Environment
- Section 5.3.2 Business Environment and Investment Climate
- Section 5.3.3 Top Causes of Mortality and Morbidity
- Section 5.3.4 Structure of the Main Government and Private Organizations Involved in the Health Care System
- Section 5.3.5 Decentralization
- Section 5.3.6 Service Delivery Organization
- Section 5.3.7 Donor Mapping
- Section 5.3.8 Donor Coordination

5.3.1 Political and Macroeconomic Environment

In this section, you will describe the political structure of the country, focusing on key questions such as whether the head of government is regularly elected (versus a dictatorship regime), whether the government has separation of powers, with the legislative and executive branches independent of each other, and whether the country is stable politically (e.g., war, revolution, civil violence are absent).

Tip!

Updated information on macroeconomic, financial, and regulatory policy indicators for most countries is available in International Monetary Fund and World Bank publications and can be found on the following websites:

http://www.imf.org

http://www.doingbusiness.org/

The rationale for the political questions is to understand the decision-making processes for policy and programs and the respective roles of different branches of government (levels of government will be addressed in section 5.3.5). This information indicates which institutions and actors the donors and technical assistance providers should work with and which systems ensure (or might be strengthened to ensure) financial and programmatic accountability.

Furthermore, you will need to develop an overview of the macroeconomic environment answering the following questions—

- Does the country have a market economy? If so, is it a transition economy (e.g., from a socialist to market economy)?
- Is the economy generally open and competitive, or is economic power highly concentrated?
- What is the level of economic development?
- What is the standard of living and poverty level?
- Is the country stable economically (e.g., low inflation, low unemployment, positive GDP growth)?
- What is the role of the private sector in the country? Does the government support private sector activity?
- Can you find any estimates of the size of the informal economic sector (usually as a percentage of GDP)? In most developing countries, the informal sector is a significant part of the overall economy, representing up to 50 percent of the total labor market.[2]

In addition, you will describe the country's general infrastructure—roads, transportation, electricity, and telecommunications.

The rationale for the economic questions is to understand the overall level of resources available in a country and who controls them. It also indicates the opportunities for private sector strengthening and expansion and for innovative financing mechanisms.

5.3.2 Business Environment and Investment Climate

Because the business environment and investment climate in a country can affect the provision of health services in the private sector and the development of the private sector, your objective here is to analyze the factors that affect private investment and enterprise growth and to identify the barriers to sustaining and expanding the private sector.

The rationale behind the expansion of the private sector is that its vitality may affect health systems in different ways. In many countries, private health providers are an effective alternative to public sector facilities that are lacking trained health personnel, essential medicines, or other necessary equipment and supplies. Private businesses can also contribute to health services. Businesses may provide health services for employees directly or by contributing to health insurance or other financing mechanisms. In recent years, many multinational companies and

[2] Informal sector workers are individuals earning income any way they can to avoid poverty, are entrepreneurs seeking to avoid government regulation and taxes, or are engaged in underground illegal activity. This population, though working, does not pay any payroll or income taxes, and that presents an obstacle to establishing social health insurance.

even larger national firms are investing in corporate social responsibility initiatives. Corporate social responsibility activities contribute to health when companies provide health services to surrounding communities, sponsor health information and education campaigns, or help market products that improve health. In summary, an environment that is conducive to private sector development can facilitate the expansion of private health services.

For a rapid glance at the business environment, consult the "Enterprise Surveys" website (World Bank 2006a) summary reports, which contain data on the investment climate in 58 countries based on surveys of more than 28,000 firms. The surveys address the difficulties enterprises encounter in starting, running, and exiting a business and provide indicators of firm productivity and performance and for each of the following topics: bureaucracy, corruption, courts, crime, finance, informality, infrastructure, innovation, jobs, tax, and trade.

The three types of analyses that are available from this website and that should be consulted are the following—

- *Investment climate snapshot of one country in the Enterprise Surveys database.* To access this, select a country in the section called "Generate economy snapshot."

- *Investment climate assessments.* Go to the "Investment Climate Assessments" page (link on the right column of the screen) and select the country of interest to obtain a more comprehensive report that draws upon the results of enterprise surveys, doing business, and other available data.

- *Doing business snapshot.* Go to the "Doing Business" page (link on the right column of the screen), which provides a snapshot of each economy's aggregate ranking on the ease of doing business and on each of the following topics: starting a business, dealing with licenses, employing workers, registering properties, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business.

From these three resources, identify the major constraints and barriers to doing business in the country—factors that could limit the expansion of the private sector or the delivery of services by private sector providers. You can subsequently confirm these findings by interviewing private health sector actors such as private companies and providers, chambers of commerce or business associations, International Finance Corporation representative, U.S. Agency for International Development (USAID) Mission staff in the Economic Growth Division, bank managers (especially a bank that specializes in small and medium enterprises), NGOs, and faith-based organizations regarding informal sector and community organizations. In addition, each of the technical modules contains specific indicators, suggestions, or both for considering private sector participation or partnerships in the health sector.

5.3.3 Top Causes of Mortality and Morbidity

To understand the general health status in the country of interest, identify the following—

- Major causes of mortality and morbidity
- Diseases that have the highest disability adjusted life years (DALY)[3]

For this section, list the 5 to 10 main causes of mortality and morbidity for the country being assessed, and the 5 to 10 diseases that have the highest DALY rates. If you want to compare the DALY rates with other countries, use the age-standardized DALY rates (see Box 5.2).

Box 5.2 Age-Standardized DALY Rates

Note: The *Revised GBD 2002 Estimates* (WHO 2002a) for countries provides age-standardized (Table 6) and non–aged-standardized (Table 5) DALY rates.

What are age-standardized DALY rates?
An age-standardized rate is a weighted average of the age-specific rates, where the weights are the proportions of a standard population in the corresponding age groups. This means that the DALY rates for each country in Table 6 (WHO 2002a) are based on a similar population age structure.

What standard population was chosen?
The approach proposed by WHO is to base the standard on the average age-structure across all countries for the period 2000–2025. The average is based on a comprehensive assessment of population age structure carried out by the United Nations Population Division.

What is the advantage of age-standardized DALY rate?
It removes the effect of variation in age structure and allows for cross-country comparisons.

Source: Ahmad and others (n.d.)

The principal sources of information follow—

- ***Revised GBD 2002 Estimates*** **(**for countries): information on life expectancy and child and adult mortality risks, healthy life expectancy (HALE), death, and DALY estimates by cause for WHO member states, mortality and burden estimates for heart disease and stroke (WHO 2002a). This source provides age-standardized (Table 6) and non–aged-standardized (Table 5) DALY rates. For a discussion on the difference between the two, see Box 5.2.

  <www3.who.int/whosis/menu> From the list on the page, choose "Burden of Disease Statistics," then choose "Latest Global Burden of Disease Estimates."

[3] DALYs for a disease are the sum of the years of life lost due to premature mortality in the population and the years lost due to disability for incident cases of the health condition. The DALY combines in one measure the time lived with disability and the time lost due to premature mortality. One DALY can be thought of as one lost year of "healthy" life and the burden of disease as a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability.

- ***Revised GBD 2002 Estimates*** (by WHO region, WHO subregion, level of development, income level, World Bank region)**:** information on incidence, prevalence, mortality, years of life lost (YLL), years lost due to disability (YLD) and DALYs by sex, cause and regions (WHO 2002b).

  <www3.who.int/whosis/menu> From the list on the page, choose "Burden of Disease Statistics," then choose "Latest Global Burden of Disease Estimates."

- ***World Health Report 2003 Statistical Annex*** (Annex Table 3 "Burden of Disease by DALYs by Cause, Sex, and Mortality Stratum in WHO Regions, estimates from 2002"): information on burden of disease by DALY but only by major regions of the world (Africa, the Americas, Eastern Mediterranean, Europe, South-East Asia, Western Pacific).

  <www.who.int/whr/2003/annex/en/index.html> See Annex Table 3.

- ***Demographic and Health Surveys (DHS*)**: DHS surveys provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition.

  <www.measuredhs.com>

- **In-country surveys and studies**

  An example extracted from an assessment undertaken in Benin is provided in Box 5.3.

You can also investigate patterns in the burden of disease to identify priorities and affected populations, especially for HIV/AIDS and malaria and for reproductive health and child health. It also could be helpful to extend the data analysis by sex and age groups, and by comparing rural and urban areas. This information will help guide any disease-specific recommendations to the USAID Mission. Note that the assessment does not have a disease-specific focus, but you may need to address disease-specific issues in developing recommendations for the mission, based on their priorities.

Box 5.3 Main Causes of Morbidity and Mortality in Benin

The epidemiological profile of Benin is characterized by a high rate of infectious diseases followed by nutritional issues. Table 2 presents the main causes of outpatient consultations and inpatient admissions in public facilities and in some private facilities in 2004.

Table 2: Main causes of outpatient consultations and inpatient admissions in Benin, 2004*

Outpatient consultations		Inpatient admissions	
Under 5	**Total**	**Under 5**	**Total**
Malaria	Malaria	Malaria	Malaria
ARI	ARI	Anemia	Anemia
Diarrhea	Gastro-Intestinal	ARI	Diarrhea
Anemia	Injuries	Diarrhea	ARI
Gastro-Intestinal	Diarrhea	Malnutrition	Injuries

* Source: Système National d'Information et de Gestion Sanitaire (SNIGS) des établissements du secteur public et de certains établissements privés en 2004.
Note: ARI = Acute Respiratory Infections

The prevalence of HIV/AIDS in 2004 was estimated at 2.0% (2.4% in urban areas and 1.6% in rural areas). Also, the rate of non-communicable diseases such as cardiac diseases and cancer is increasing in Benin. WHO data on mortality and disability adjusted life years (DALY) for Benin, based on the year 2002, are presented in Table 3. Age-standardized rates allow comparing with other countries having different age structures. But non-standardized rates, which reflect the absolute figures, present a more precise profile of the morbidity and mortality in Benin and show that acute respiratory infections (ARI) and malaria are the main causes of mortality and morbidity. Figures also show the impact of non-communicable diseases, injuries and other health problems (Perinatal conditions).

Table 3: Diseases that have the highest DALY and main causes of death according to the WHO Global Burden of Disease (2002)

Diseases that have the highest DALY (age-standardized)	Main causes of death (age-standardized)	Diseases that have the highest DALY (non-standardized)	Main causes of death (non-standardized)
ARI	Cardiovascular diseases	ARI	ARI
Malaria	ARI	Malaria	Malaria
Injuries	Cancer	Injuries	Cardiovascular diseases
HIV/AIDS	Malaria	Diarrhea	Diarrhea
Cardiovascular diseases	Injuries	Perinatal conditions	Injuries
Neuropsychiatric conditions	HIV/AIDS	HIV/AIDS	HIV/AIDS
Diarrhea	Diarrhea	Neuropsychiatric conditions	Cancer

Source: Translated from Adeya and others (2006)

5.3.4 Structure of the Main Government and Private Organizations Involved in the Health Care System

As part of the assessment, one key to understanding the functioning of a health care system is to understand the structure of the main ministries and private organizations involved in the health care system. These are, for example, the Ministry of Health (MOH), the Ministry of Finance, Social Security, health maintenance organizations, private insurers, and private provider associations. This analysis will help you identify appropriate stakeholders to consult with for this assessment.

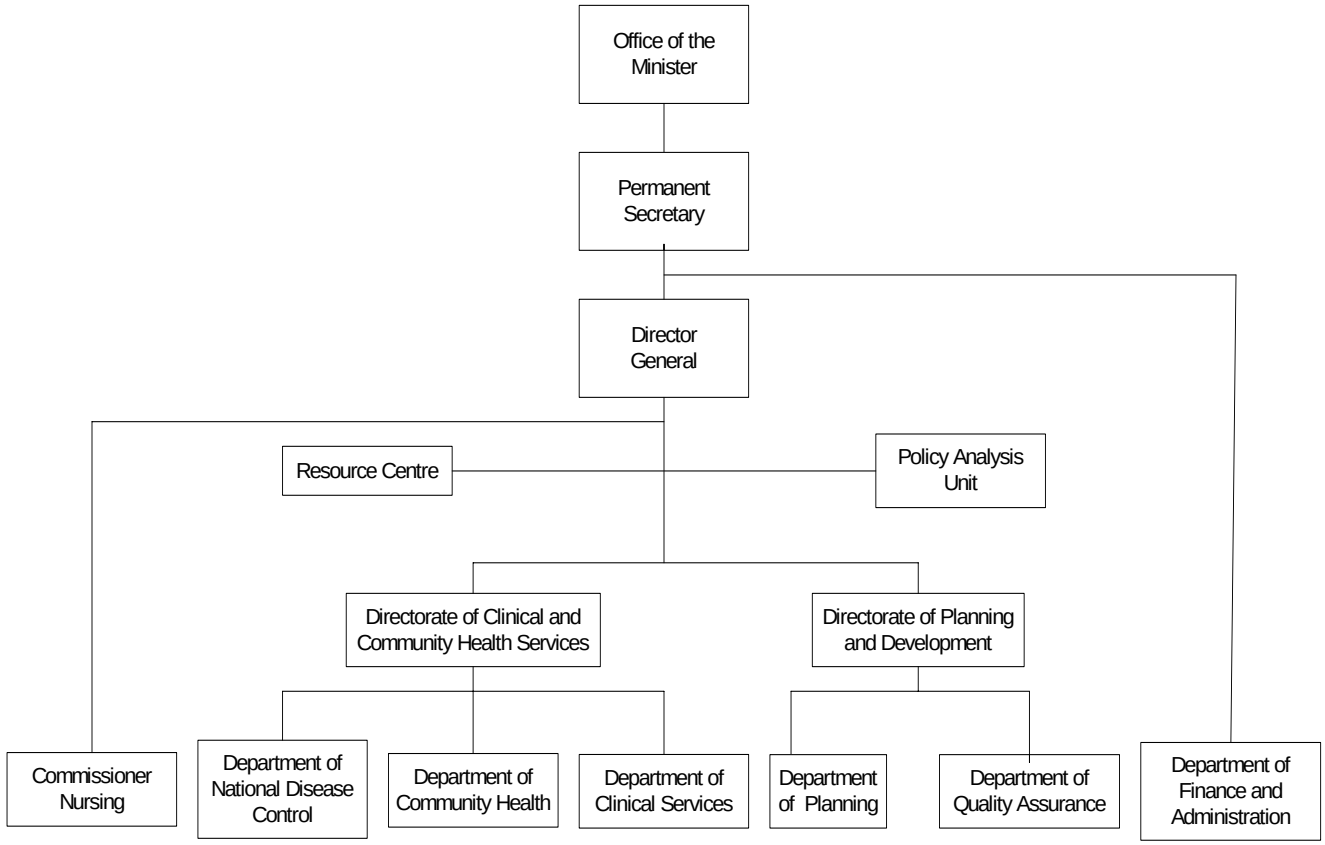
The elements to identify, link, and map are the following—

- Which agencies and organizations have mandates that affect the health sector?
- What are the functions of the following bodies: financing, planning, human resource management, service delivery, project implementation, insurance, governance, information and statistics management, and regulation? Once you determine the functions, you can further break down each one.
- What departments or divisions are responsible for each of these functions? Who heads of each of these divisions?
- Who are the executive teams or individuals?

Figure 5.1 presents an organigram from Uganda, which illustrates the structure within the MOH.

Proposed sources of information for this topic are the following—

- Ministries' or private organizations' offices. Also consult their websites and publications, if any.
- WHO's *International Digest of Health Legislation* (WHO 2000). This publication provides, for some countries, the organization of the MOH. It also gives access to national and international texts of legislation for the health care system. Where possible, links are provided to other websites that contain full texts of the legislation in question.



Source: Ministry of Health, Republic of Uganda (n.d.)

Figure 5.1 Organigram of the Ministry of Health of the Republic of Uganda

5.3.5 Decentralization

Decentralization is the distribution of power, authority, and responsibility for political, economic, fiscal, and administrative systems between the center and the regional or local levels. It is a critical element to understand before any type of assessment be initiated, because it will provide you with information on how the health system is organized and where to collect the information you need for the modules but, more specifically, at which levels of government to collect it. The tip box below explains the different forms of decentralization.

Your objective regarding this topic will be to identify the responsibilities of the different levels of government with regard to the functions of the health care system. The functions of the government in the health care system are (but are not restricted to) the following—

- Financing the health system
- Managing human resources in the health sector
- Organizing health service delivery
- Implementing programs and projects related to health
- Procuring and distributing pharmaceuticals
- Managing health information systems and data
- Performing maintenance
- Handling capital investments in health infrastructures

According to the level and depth of decentralization, these responsibilities are assigned differently. In centrally governed countries, the responsibilities are placed at the central or national level, so the information will be available at that level. In more decentralized settings, some responsibilities are devolved to provinces, districts, or other agencies. In these cases, the assessor should focus on obtaining information at those levels of government or from these agencies.

Tip!

Forms of Decentralization

- **Deconcentration** (or *administrative decentralization*): Transfer of authority and responsibility from central agencies in a country's capital city to field offices of those agencies at a variety of levels (regional, provincial, state, local).
- **Delegation:** Transfer of authority and responsibility from central agencies to organizations not directly under the control of those agencies or organizations outside of the government, for example, semiautonomous entities, NGOs, and regional or local governments.
- **Devolution** (or *democratic decentralization*): Transfer of authority and responsibility from central government agencies to lower level autonomous units of government through statutory or constitutional provisions that allocate formal powers and functions.
- **Divestment** (sometimes called *privatization*): Transfer of planning and administrative responsibility or other public functions from government to voluntary, private, or nongovernment institutions. In some cases, governments may transfer to "parallel organizations"—such as national industrial and trade associations, professional or ecclesiastical organizations, political parties, or cooperatives—the right to license, regulate, or supervise their members in performing functions that were previously controlled by the government.

One of the methods that can be used to evaluate the level of decentralization is to identify for each function the level of responsibility each level of government has for it, which range between extensive, some, limited, or no responsibilities.

Table 5.2 can be used as a template to present the results of the analysis of decentralization. For each line in the table, write whether each level of government has extensive, some, limited, or no responsibilities related to that function. Note that you can modify the template by excluding or adding lines and categories, to meet the needs of the assessment or the context of the country. Completing Table 5.2 will then provide an indication of where information on a specific issue or topic can be obtained. An example of a completed table is presented in Table 5.3, detailing the results of assessing responsibilities in Zambia districts. It shows that in Zambia, the districts have no power to determine salaries, but have full responsibility for contracting nonpermanent staff. This observation also means that any information related to the contracting of health personnel in Zambia would probably need to be obtained at the district level, whereas information on how the salaries and benefits are determined would be obtained at the national, or central, level.

Table 5.2 can be tentatively completed before the in-country assessment by reviewing secondary sources on the country's health care system organization and reforms, and then verifying them with in-country stakeholders. Note that each module provides specific guidance on decentralization.

Table 5.2 Template for Organizing Information Regarding the Level of Decentralization of a Government

Health System Functions	Level of Government		
	National	Subnational (Provincial, Regional)	Local Level (Municipality, District)
Financing			
Revenue generation and sources			
Budgeting, revenue allocation			
Expenditure management and accounting			
Financial audit			
Human resources			
Staffing (planning, hiring, firing, evaluation)			
Contracts			
Salaries and benefits			
Training			
Service delivery and program or project implementation			
Hospital and facility management			
Defining service packages (primary, tertiary care)			
Targeting service delivery to specific populations			
Setting norms, standards, regulation			
Monitoring and oversight of service providers			
User participation			
Managing insurance schemes			
Contracting			
Payment mechanisms			
Operation maintenance			
Medicines and supplies (ordering, payment, inventory)			
Vehicles and equipment			
Facilities and infrastructure			
Information management			
Health information systems design			
Data collection, processing, and analysis			
Dissemination of information to various stakeholders			

Note: For each level of government, determine whether that level has extensive, some, limited, or no responsibilities related to the function.

To evaluate decentralization in the country you are assessing, you may find documents from the following sources—

- **The World Bank**
  - Decentralization and subnational regional economics: <www1.worldbank.org/publicsector/decentralization>
  - Decentralization in South Asia: <www.worldbank.org/sardecentralization>
  - Decentralization in Latin America and the Caribbean: <http://wbln0018.worldbank.org/LAC/LAC.nsf/ECADocByUnid/D2FDB2AFDECA2E0585256DBF0079BCC7?Opendocument>
  - Governance and public sector in MENA: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/MENAEXT/EXTMNAREGTOPGOVERNANCE/0,,menuPK:497031~pagePK:34004175~piPK:34004435~theSitePK:497024,00.html>
- **PHR*plus***. Search the bibliographic database of the resource center. <www.phrplus.org>
- **Center for International Earth Science Information Network (CIESIN)** <http://www.ciesin.org/decentralization/Entryway/siteindex.html>

Table 5.3 Example: Level of Responsibility at the District Level in Zambia

Health System Functions	Local Level (Municipality, District)
Financing	
Revenue generation and sources	**No responsibilities:** District Health Management Team (DHMT) and District Health Board (DHB) almost totally dependent on central allocations, but currently receiving about 50 percent of the MOH/Central Board of Health (MOH/CBOH) budget
Expenditure management and accounting	**Some responsibilities:** DHMT and DHB develop and manage budget plans with central review, but face restrictions on the percentage spent on administration, capital, percentage allocated to different levels
Human resources	
Staffing (planning, hiring, firing, evaluation)	**Some responsibilities:** DHBs have hiring and firing authority only for delinked personnel (which applies to nonprofessional certified staff only after 1997)
Contracts	**Extensive responsibilities:** Contracting of nonpermanent staff
Salaries and benefits	**No responsibilities:** Salaries and allowances centrally determined
Service delivery and program or project implementation	
Hospital and facility management	**No responsibilities:** Major hospitals managed by centrally appointed boards; facility committees composed of health workers and community representatives; facility action plan and budget prepared with technical support from DHMT and approved by DBH and CBOH
Managing insurance schemes	**Extensive responsibilities:** Prepayment schemes allowed in all districts
Payment mechanisms	**Extensive responsibilities:** Districts allowed and encouraged to use variety of payment mechanisms including per capita and accepting prepayments and in-kind payments

Source: Adapted from Bona Chitah and Bossert (2001).

5.3.6 Service Delivery Organization

The service delivery function is a health care system's ability to provide quality service and ensure client satisfaction. The information gathered for this section will describe how the delivery of care is organized, how it functions, and who the health actors participating in service delivery are. Note that this dimension of health systems is also discussed in greater detail in the Health Service Delivery module, Chapter 8.

To have a complete picture of the health system's service delivery system (human resources and facilities), the country would ideally have data or estimates to fill in the Table 5.4 (note that the terminology for facilities and personnel may vary from country to country). For this table, you need to indicate a number for each box. For example, indicate the number of hospitals and clinics that operate in the public sector, the private for-profit sector, and elsewhere. For the human resources, indicate the number of doctors, nurses, and other formal and informal health care staff that work in the public and private sectors.

Sources of information include health facility or health provider surveys, UN agencies in country, the MOH, and associations of private providers.

Table 5.4 Country's Service Delivery System: Facilities and Human Resources Sample Table

Setting	Public	Private				Total
		For-profit	Not-for-profit or NGO	Religious	Total Private	
Facilities						
Hospitals						
Clinics						
Health posts						
Laboratories						
Pharmacies						
Others (e.g., voluntary counseling and testing centers)						
Human resources						
Doctors						
Nurses						
Midwives						
Traditional healers						
Other						

Data on private health service delivery that describes demand (utilization data) and supply (in terms of the quantity of providers, market share, and composition) is ideal but not common in most developing countries. Many countries, however, do possess data on the split between urban and rural locations of service providers, a breakdown that is critical for analyzing dimensions of access, quality, and equity. NHA data, if available, often includes the percentage of total health financing that goes to private sector providers. Utilization data (outpatient visits and hospital admissions per capita) may be available from a household survey on health service utilization or from the DHS (which presents, for example, the percentage of women of reproductive age who get their contraception from the private sector). Unfortunately, MOH utilization data typically cover only public sector providers.

Otherwise, you can also contact private provider associations to find out if that sector is organized, who its members are, and its role and experiences in partnering with the government or donors.

In many developing countries, the informal private health sector is a significant source of services. The most recent DHS or household health expenditure survey may have data on the informal sector's "share" of the market. The informal health sector includes traditional healers, herbalists, kiosks, and black market for medicines. One of the rationales for this section is that partnering with informal health providers can be an effective way to reach some target populations and to change behaviors.

5.3.7 Donor Mapping

Donor mapping is an essential exercise to identify the different actors and their involvement and responsibilities in the health care systems and is also important for recommending priority interventions at the end of the assessment. In some countries, donors can play a major role in the health care system in terms of financing, advocacy, technical support, or delivery of services and goods. An example of donor mapping analysis is given in Table 5.5.

This task can be very time–consuming, so try to find out if a donor mapping analysis has been done recently and use that information rather than compiling it on your own. You will want to use recent data because donor funding and related information can change significantly from one year to the next.

In developing the donor mapping analysis for your country, follow these steps—

1. List the donors involved in the health sector in the country.

2. For each donor, list the field(s) of intervention, activities, or programs related to health.

3. For each field, list the type of support and commitment provided. Key categories of support are—

    a. *Research and development:* product discovery and development of new therapies (e.g., vaccines and treatments)

    b. *Technical assistance:* support for improved service access and technical assistance to public, NGO, or private sector providers

    c. *Service support:* pharmaceutical donations or financing support for procurements or for support of distribution programs through social marketing efforts

    d. *Advocacy* (national and international levels): advocating for increased international and national response to specific diseases, fundraising for specific control programs

    e. *Financing:* funds for specific programs (malaria, HIV/AIDS, TB) or direct budget support

4. Identify the amount of funds allocated and committed to each field of intervention and the timeline (dates and number of years).

5. Understand how the money flows (through sector-wide approaches [SWAps], MOH, local development agencies, or own-implementing agencies).

6. For each intervention, specify the counterpart (if applicable) within the government.

7. List the current and committed activities, and specify the start and end dates.

The following are sources of data you can explore for the donor mapping—

- Annual reports on external assistance and direct foreign investment produced by governments

- Annual reports from donors

- Donor websites (including links to country specific programs and missions' websites)

- The President's Emergency Plan for AIDS Relief (PEPFAR) or the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Countries that receive support from PEPFAR or the Global Fund are requested, as part of the application process, to undertake and submit a donor mapping analysis. If the country you are assessing received one of these types of support, you might want to obtain their application proposal from the following websites—

    - PEPFAR: www.usaid.gov/our_work/global_health/aids/pepfar.html

    - GFATM: http://www.theglobalfund.org/en

Table 5.5 Example of Donor Mapping Analysis

Donor	Field of Intervention and Activities	Timeline and Duration	Amount of Commitment	Project Location	Counterpart
Example 1: Philippines					
USAID	Development of a social insurance marketing plan	1999–2002		Department of Health (DOH) and regional offices	PhilHealth
World Bank	Development of a pro-poor benefits package and conduct actuarial analysis Pilot test zero co-pay benefit package to increase enrollment of poor	2003			DOH, PhilHealth
Example 2: Angola					
Global Fund	Malaria (Round 3)	2006–2007	USD 38 million (requested), USD 28 million (approved)	National level	MOH
	HIV/AIDS (Round 4)	2006–2007	USD 92 million (requested), USD 28 million (approved)	National level	MOH
European Union (EU)	At the national level, strengthening blood bank system	2004–2007		Luanda, Benguela, Huila, Huambo, Bie	
	At the provincial level, support national rehabilitation program	2003–2007	Euro 14 million	Provinces	

Note: These examples are not inclusive for all donors in the countries listed.

The donor mapping analysis will also be useful for comparing donor-to-government interventions, particularly in identifying gaps and overlaps in health care interventions and financing or to determine if donor funding is in line with the MOH's strategies and interventions. See Table 5.6 for an illustrative example of the Angola case. This example shows donor inputs (in the form of funds or goods provided directly to the MOH or through other projects and organizations) and what the government of Angola is financing through its own budget.

Table 5.6 Comparison of Donor and Government Interventions in the Health Care System in Angola

Interventions	Donors				MOH	
	WHO	UNICEF	EU	GFATM (UNDP)	Strategic Plan for the Accelerated Reduction of MMR and IMR	Sector Development Plan 2002–2005
National health policy and strategy	✓		✓	Angola is the principal recipient of the first round of Global Fund funds, so UNDP will design a program to strengthen the MOH and health system. Program to be implemented over 2006–2007.	✓	✓
Norms and protocols	✓	✓	✓			
Increase integration and coordination between the vertical public health and the provincial health directorates		✓	✓		✓	
Basic or financial management training or both		✓	✓		✓	
Clinical training	✓	✓			✓	
Provincial supervision of municipalities		✓			✓	
Mapping all health facilities in the municipalities		✓	✓		✓	
Health profile of municipal population					✓	

Source: Connor and others (2005).
Notes: UNDP = United Nations Development Programme; MMR = maternal mortality ratio; IMR = infant mortality rate

5.3.8 Donor Coordination

Your objective in this section is to assess the level of coordination among the donors (joint monitoring teams, joint high-level meetings, donor coordination bodies) and between donors and local governments. Because multiple inconsistent policies and practices by donors impose burdens on partners, coordination can enhance the effectiveness of aid, thus enhancing the achievement of sustainable improvements, particularly for countries that receive a lot of donor support.

Coordination is essential to ensure that—

- Development assistance is aligned with country priorities and is adapted to the country context.
- Donor requirements are harmonized when multiple donors finance the same activity (e.g., to avoid having each donor require different reports at different dates).
- Information is shared.

The issues and questions you will need to address to analyze the level of coordination and alignment between the government and the donor are the following—

- Do the donor country programs draws on common (donor and government) analyses and take into account the government's objectives? (Sources: donors and MOH documents and interviews)

- Is aid programmed over a multiyear time frame that is consistent with the financial planning horizon of the government? (Sources: donor publications and interviews)

- Have the donors and the government agreed on a framework for review and monitoring of donor assistance? Ideally, they should seek to incorporate the framework into multi-donor review and monitoring processes.

- Is the government or any other organization engaged in leadership of the consultative institutions, by organizing and chairing consultative groups, meetings, working groups, and by providing secretariat? If the government is leading this process, it requires adequate staffing, resources, and appropriate location within the government structure. Who is financing these structures, if they exist?

- Presence of SWAps, a method of working between government and development partners. SWAp is a mechanism for coordinating support to public expenditure programs, and for improving the efficiency and effectiveness with which resources are used in the sector (Foster, Brown, and Conway 2000). The core elements of a SWAp are the following—

    - All significant funding agencies in support of a shared, sector-wide policy and strategy

    - A medium-term expenditure framework or budget that supports this policy

    - Government leadership in a sustained partnership

    - Shared processes and approaches for implementing and managing the sector strategy and work program, including review of sectoral performance against jointly selected milestones and targets

    - Commitment to move to greater reliance on government financial management and accountability systems

The issues to address to analyze the level of coordination and harmonization among donors are as follows—

- Do donors share information on who is doing what to avoid duplication of efforts?

- Do donors have explicit agreements among themselves (e.g., on roles, salaries, or on who finances what)?

- Have donors implemented standardized systems and procedures? Identify whether donor requirements are harmonized when multiple donors finance the same activity (e.g., do they avoid having each donor require different activity and financial reports at different dates?). Is the government coordinating these efforts?

Review the existing information, and identify gaps and weaknesses in the level of coordination between government and donor, and among donors, with regard to the issues and questions listed above.

References

Adeya, G. A. Bigirimana, K. Cavanaugh, and L. Miller Franco. 2006. *Évaluation rapide du système de santè du Bénin. Pour le compte de l'Agence des États-Unis pour le développement international.*

Ahmad, Omar B., Cynthia Boschi-Pinto, Alan D. Lopez, Christopher J. L. Murray, Rafael Lozano, and Mie Inoue. n.d. *Age Standardization of Rates: A New WHO Standard* (GPE Discussion Paper Series, No.31). Geneva: World Health Organization. <http://w3.whosea.org/healthreport/pdf/paper31.pdf> (accessed Sept. 14, 2006)

Bona Chitah, Mukosha, and Thomas Bossert. 2001. *Decentralization of Health Systems in Zambia: Resource Allocation and District Performance*. Boston: Harvard School of Public Health.

Connor, Catherine, Yogesh Rajkotia, Ya-Shin Lin, and Paula Figueiredo. 2005. *Angola Health System Assessment.* Bethesda, MD: Partners for Health Reformplus Project, Abt Associates Inc.

Foster M, A. Brown, and T. Conway. 2000. *Sector-wide Approaches for Health Development: A Review of Experiences* (WHO document WHO/GPE/00.1) Geneva: Global Programme on Evidence and Health Policy, World Health Organization.

Ministry of Health, Republic of Uganda. n.d. Macro Structure of the Ministry of Health. <www.health.go.ug/organigram.htm> (accessed Sept. 14, 2006).

UNICEF (United Nations Children's Fund). 2001. *National Report on Follow-up to the World Summit for Children: Technical Guidelines for the Statistical Appendix*. The Netherlands: UNICEF.

WHO (World Health Organization). 2000. *International Digest of Health Legislation.* Geneva: WHO. <www3.who.int/idhl-rils> (accessed Sept. 14, 2006).

———. 2002a. *Revised GBD 2002 Estimates* for Countries. Geneva: WHO. <www3.who.int/whosis/menu.cfm?path=evidence,burden,burden_estimates,burden_estimates_2002N,burden_estimates_2002N_2002Rev_country&language=english> (accessed Sept. 14, 2006).

———. 2002b. *Revised GBD 2002 Estimates* (Estimates by WHO Region, Estimates by WHO Sub-Region, Estimates by Level of Development, Estimates by Income level, Estimates by World Bank Region). Geneva: WHO. <www3.who.int/whosis/menu.cfm?path=evidence,burden,burden_estimates,burden_estimates_2002N,burden_estimates_2002N_2002Rev&language=english> (accessed Sept. 14, 2006)

———. 2003. *World Health Report 2003 Statistical Annex.* Geneva: WHO. <www.who.int/whr/2003/annex/en/index.html> (accessed Sept. 14, 2006).

———. 2006. *World Health Report 2006.* Geneva: WHO. <http://www.who.int/whr/2006/en/> (accessed Sept. 26, 2006).

World Bank 2006a. Enterprise Surveys. Washington, DC: World Bank. <http://rru.worldbank.org/InvestmentClimate> (accessed Sept. 14, 2006).

———. 2006b. *World Development Indicators 2006.* Washington, DC: World Bank. <www.worldbank.org/data/wdi2006/> (accessed Sept. 14, 2006).

Annex 5A. Component 1 Data Summary Table—Sample Country

Health Systems Data		Country level data		Average value for regional comparator[1]		Average value for income group comparator[2, 3]		
				Middle East and North Africa		Low-income economies		
		Yemen	Year of data	MENA	Year of data	LI	Year of data	Source of Data
Chapter 5. Core Module								
Indicator 1	Population, Total	20,329,350	2004	22,512,055	2004	39,904,246	2004	The World Bank. 2006. World Development Indicators.
Indicator 2	Population growth (annual %)	3.13	2004	1.94	2004	2.19	2004	The World Bank. 2006. World Development Indicators.
Indicator 3	Rural population (% of total)	73.98	2004	32.99	2004	67.40	2004	The World Bank. 2006. World Development Indicators.
	Urban population (% of total)	26.02	2004	67.01	2004	32.60	2004	The World Bank. 2006. World Development Indicators.
Indicator 4	Contraceptive prevalence (% of women aged 15-49)	23.00	2003	50.14	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Fertility rate, total (births per woman)	6.00	2004	3.39	2004	4.89	2004	WHO. 2006. The World Health Report.
Indicator 6	Pregnant women who received 1+ antenatal care visits (%)	34.00	1997	64.57	-	74.25	-	WHO. 2006. The World Health Report.
	Pregnant women who received 4+ antenatal care visits (%)	11.00	1997	62.33	-	46.49	-	WHO. 2006. The World Health Report.
Indicator 7	Prevalence of HIV, total (% of population aged 15-49)[4]	0.10	2003	0.47	2003	4.86	2003	The World Bank. 2006. World Development Indicators.
Indicator 8	Life expectancy at birth, total (years)	61.27	2004	69.92	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 9	Mortality rate, infant (per 1,000 live births)	82	2004	35	2004	84	2004	The World Bank. 2006. World Development Indicators.
Indicator 10	Mortality rate, under age 5 (per 1,000)	111	2004	42	2004	131	2004	The World Bank. 2006. World Development Indicators.
Indicator 11	Maternal mortality ratio (per 100,000 live births)[5]	570	2000	196	2000	738	2000	WHO. 2006. The World Health Report.
Indicator 12	GDP per capita (constant 2000 USD)	534	2004	3,422	2004	373	2004	The World Bank. 2006. World Development Indicators.
Indicator 13	GDP growth (annual %)	2.70	2004	7.59	-	5.49	-	The World Bank. 2006. World Development Indicators.

Indicator 14	Per capita total expenditure on health at international dollar rate	89.00	2003	312.93	2003	72.74	2003	WHO. 2006. The World Health Report.
Indicator 15	Private expenditure on health as % of total expenditure on health	59.10	2003	46.17	2003	53.81	2003	WHO. 2006. The World Health Report.
Indicator 16	Out-of-pocket expenditure as % of private expenditure on health	95.50	2003	84.00	2003	84.67	2003	WHO. 2006. The World Health Report.
Indicator 17	GINI Index	NA	NA	37.68	-	38.23	-	The World Bank. 2006. World Development Indicators.
Chapter 6. Governance Module								
Indicator 1	Voice and Accountability							
	Point estimate[6]	-1.0	2004	-1.1	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	22.80	2004	17.82	2004	27.52	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 2	Political Stability							
	Point estimate[6]	-1.5	2004	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	7.30	2004	30.86	2004	25.88	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 3	Government Effectiveness							
	Point estimate[6]	-0.8	2004	-0.3	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	20.70	2004	41.41	2004	21.96	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 4	Rule of Law							
	Point estimate[6]	-1.1	2004	-0.4	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	12.10	2004	41.24	2004	22.57	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 5	Regulatory Quality							
	Point estimate[6]	-1.0	2004	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	14.80	2004	27.72	2004	24.63	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 6	Control of Corruption							
	Point estimate[6]	-0.8	2004	-0.4	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	Percentile rank[7]	22.70	2004	41.36	2004	24.12	2004	The World Bank. Governance Indicators: 1996-2004.

Chapter 7. Health Financing Module								
Indicator 1	Total expenditure on health as % of GDP	5.50	2003	5.49	2003	5.18	2003	WHO. 2006. The World Health Report.
Indicator 2	Per capita total health expenditure, at average exchange rate (USD)[8]	32	2003	158	2003	26	2003	WHO. 2006. The World Health Report.
Indicator 3	Government expenditure on health as % of total government expenditure	6.00	2003	7.74	2003	8.68	2003	WHO. 2006. The World Health Report.
Indicator 4	Public (government) spending on health as % of total health expenditure	40.90	2003	53.83	2003	46.19	2003	WHO. 2006. The World Health Report.
Indicator 5	Donor spending on health as % of total health spending	8.80	2003	3.64	2003	18.26	2003	WHO. 2006. The World Health Report.
Indicator 6	Out-of-pocket expenditure as % of private expenditure on health	95.50	2003	84.00	2003	84.67	2003	WHO. 2006. The World Health Report.
Chapter 8. Health Service Delivery Module								
Indicator 1	Number of hospital beds (per 10,000 population)	6	NA	19	-	26	-	WHO. 2006. The World Health Report.
Indicator 2	Percentage of births attended by skilled health personnel per year	27.00	2003	76.18	-	47.57	-	The World Bank. 2006. World Development Indicators.
Indicator 3	DPT3 immunization coverage: one-year-olds immunized with three doses of diptheria, tetanus toxoid, and pertussis (DTP3) (%)	78.00	2004	91.21	2004	73.40	2004	WHO. 2006. The World Health Report.
Indicator 4	Contraceptive prevalence (% of women aged 15-49)	23.00	2003	50.14	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Pregnant women who received 1+ antenatal care visits (%)	34.00	1997	64.57	-	74.25	-	WHO. 2006. The World Health Report.
Indicator 6	Life expectancy at birth, total (years)	61.27	2004	69.92	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Mortality rate, infant (per 1,000 live births)	82	2004	35	2004	84	2004	The World Bank. 2006. World Development Indicators.
Indicator 8	Maternal mortality ratio (per 100,000 live births)[5]	570	2000	196	2000	738	2000	WHO. 2006. The World Health Report.
Indicator 9	Prevalence of HIV, total (% of population aged 15-49)[4]	0.10	2003	0.47	2003	4.86	2003	The World Bank. 2006. World Development Indicators.
Chapter 9. Human Resources Module								
Indicator 1	Physicians (density per 1,000 population)	0.33	2004	1.13	-	0.42	-	WHO. 2006. The World Health Report.
Indicator 2	Nurses (density per 1,000 population)	0.65	2004	1.99	-	1.14	-	WHO. 2006. The World Health Report.
Indicator 3	Midwives (density per 1,000 population)	0.01	2004	0.04	-	0.22	-	WHO. 2006. The World Health Report.
Indicator 4	Pharmacists (density per 1,000 population)	0.13	2004	0.52	-	0.08	-	WHO. 2006. The World Health Report.
Indicator 5	Lab technicians (density per 1,000 population)	0.23	2004	0.34	-	0.07	-	WHO. 2006. The World Health Report.
Chapter 10. Pharmaceutical Management Module								

Indicator 1	Total expenditure on pharmaceuticals (% total expenditure on health)	37.80	2000	24.12	2000	27.04	2000	WHO. 2004. The World Medicines Situation.
Indicator 2	Total expenditure on pharmaceuticals (per capita average exchange rate)	8	2000	37	2000	5	2000	WHO. 2004. The World Medicines Situation.
Indicator 3	Government expenditure on pharmaceuticals (per capita average exchange rate)	NA	2000	14	2000	2	2000	WHO. 2004. The World Medicines Situation.
Indicator 4	Private expenditure on pharmaceuticals (per capita average exchange rate)	8	2000	24	2000	4	2000	WHO. 2004. The World Medicines Situation.
Chapter 11. Health Information System Module								
Indicator 1	Maternal mortality ratio reported by national authorities[9]	370	2001	113	2001	518	2001	UNICEF. 2006. The State of the World's Children 2006.
Indicator 2	Mortality rate, under age 5 (per 1,000)	111	2004	42	2004	131	2004	The World Bank. 2006. World Development Indicators.
Indicator 3	HIV prevalence among pregnant women aged 15-24	NA	NA	NA	-	10	-	UNICEF. 2006. The State of the World's Children 2006.
Indicator 4	Proportion of children under 5 years who are underweight for age	46	1997	13	-	29	-	WHO. 2006. The World Health Report.
Indicator 5	Number of hospital beds (per 10, 000 population)	6	NA	19	-	26	-	WHO. 2006. The World Health Report.
Indicator 6	Contraceptive prevalence (% of women aged 15-49)	23.00	2003	50.14	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Percentage of disease surveillance reports received at the national level from districts compared to number of reports expected	73.58	2005	94.95	2005	92.35	2005	WHO. 2005. Annual WHO/UNICEF Joint Reporting Form.

NOTES:

NC: Not Calculated because the (*) regional comparator includes both high income countries as well as some countries that have a population of less than 30,000, which are not classified by the World Bank.

NA: Data Not Available

-: No specific year is noted here since the average is calculated across different countries, where the data is reported in different years

1- The geographic classifications used by the World Bank are for low-income and middle-income economies only. Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. The countries are divided into 6 regions: East Asia and Pacific (EAC), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), Sub-Saharan Africa (SSA). Countries noted with * indicate high-income countries (with the exception of South Africa classified as an Upper-middle income country) which are not part of the World Bank geographic classification.

2- The classification of countries by income group is based on the World Bank classification which classifies member economies, and all other economies with populations of more than 30,000. The countries which are not in a category have population less than 30,000.

3- The groups are: LI (low income), $825 or less; LMI (lower middle income), $826 - $3,255; UMI (upper middle income), $3,256 - $10,065; and (HI) high income, $10,066 or more (the HI countries are further divided between OECD and non-OECD, noted n-OECD). Economies are divided according to 2004 GNI per capita, calculated using the World Bank Atlas method.

4- The following countries report "<0.1" : Azerbaijan, Bosnia and Herzegovina, Brunei Darussalam , Bulgaria, Croatia, Egypt, Iraq, Japan, Jordan, Mongolia, Philippines, Republic of Korea., Romania, Slovakia, Slovenia, Sri Lanka, Syrian Arab Republic, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkmenistan

5- Estimates derived by regression and similar estimation methods. Countries include: Afghanistan, Albania, Algeria, Angola, Armenia, Bhutan, Bolivia, Botswana, Burundi, Cape Verde, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Korea, Democratic Republic of Congo, Djibouti, Dominican Republic, El Salvador, Equatorial Guinea, Fiji, Gambia, Georgia, Ghana, Guinea Bissan, Indonesia, Iraq, Kazakhstan, Kyrgyzstan, Lau People's Democratic Republic, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Maldives, Mozambique, Myanmar, Namibia, Nicaragua, Niger, Nigeria, Oman, Pakistan, Papua New Guinea, Senegal, Sierra Leone, Solomon Islands, Somalia, South Africa, Sudan, Swaziland, Syrian Arab Republic, Tajikistan, Timor-Leste, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Viet Nam.

6- Ranges from -2.5 to 2.5

7- Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error)

8- Democratic People's Republic of Korea report "<1000" for the Per capita total expenditure on health at average exchange rate (USD) - 2003

9- The regional and global totals in this table are based on the most recent of these assessments and refer to the year 1995. Several countries have data that refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country. These countries include: Dominican Republic, Ghana, Lebanon, Papau New Guinea, Solomon Islands, Syrian Arab Republic, Turkey.