Section 3: Guidance on Assessing Health System Building Blocks

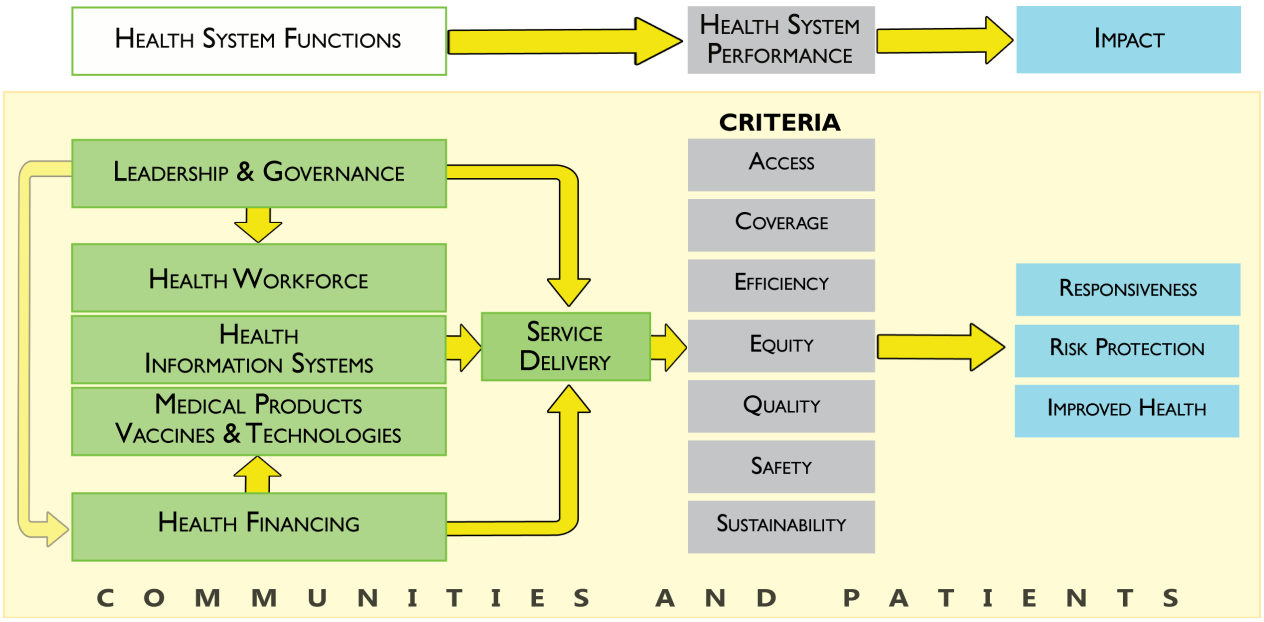
The modules in this section describe the indicators that can be used to assess each of the health system building blocks.

CONTENTS

Module 1
Country and Health System Overview

This module describes the country-specific background information that is included in the overview chapter of the Health System Assessment report.

FIGURE 3.1.1 IMPACT OF BUILDING BLOCK INTERACTIONS



Introduction

This module helps the team leader and assessment coordinator understand which background information to gather about the HSA country and its health system.

The Country and Health System Overview is the background or foundational chapter of the assessment report. Ideally, the team leader will write or assign someone to draft this chapter before the in-country visit. All technical members of the HSA team should read the chapter so they understand the overall health system context, before starting for their individual building block analyses.

This module looks at how the HSA approaches the country and health system overview:

- Subsection 1.1 defines issues affecting the health system.
- Subsection 1.2 examines general health conditions in the research country.
- Subsection 1.3 describes assessment indicators.
- Subsection 1.4 describes strategic planning.
- Subsection 1.5 explores key issues related to donor support to health system strengthening.
- Subsection 1.6 contains a checklist of topics that the team leader or other writers can use to make sure they have included all recommended content in the chapter.

1.1 ISSUES AFFECTING THE HEALTH SYSTEM

The overview should include a discussion of the key opportunities and challenges facing the health system. Most countries discuss these challenges in their MOH statistical bulletin, health system strategy, or other planning documents, so the HSA team can identify the challenges during the desktop review of secondary source materials.

The issues generally can be grouped into the following categories:

- Health issues
- Systemic issues
- Political/policy issues

HEALTH ISSUES

To understand the general health status in the study country, the HSA team should identify the following:

- Major causes of mortality and morbidity: List the 5-10 main causes of mortality and morbidity for the country. (As noted above, these can usually be found in MOH documents.) See Table 3.1.1 for an illustrative list, from the Guyana HSA report.

TABLE 3.1.1 MAJOR CAUSES OF MORTALITY IN GUYANA, 2008

Cause of Death	Rank	Total	Rate (per 1,000 population)
Ischemic heart diseases	1	631	0.8
Cerebrovascular diseases	2	567	0.7
Neoplasms	3	469	0.6
Diabetes mellitus	4	426	0.6
Hypertensive diseases	5	309	0.4
HIV disease (AIDS)	6	239	0.3
Intentional self-harm (suicide)	7	169	0.2
Heart failure	8	165	0.2
Acute respiratory infections	9	161	0.2
Cirrhosis and other chronic diseases of the liver	10	132	0.2
Land transport accidents	11	125	0.2
Assault (homicide)	12	118	0.2

Source: Health Systems 20/20 and Guyana Ministry of Health (2011), using data from the MOH 2008 Statistics Bulletin

- Diseases that have the highest disability adjusted life years (DALY).[1] List the 5-10 diseases that have the highest DALY rates. If you want to compare the rates with those of other countries, use the age-standardized DALY rates.

Patterns in the burden of disease also can be noted, so that the team can begin to identify priorities for research and affected populations, especially for HIV/AIDS, malaria, reproductive health, and child health. It can be helpful to extend the data analysis by sex and age groups, and by rural versus urban areas. The accompanying text box shows an analysis done by the HSA team in Benin.

Knowing the main causes of mortality and morbidity is important for developing and prioritizing HSA recommendations. While the HSA approach does not have a disease-specific focus, it may be necessary to address such issues, based on client priorities. For example, the Guyana HSA showed that chronic diseases are a particular reason for concern, and this led to a recommendation to extend clinic hours to serve patients better.

[1] 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.

Benin HSA: Main Causes of Morbidity and Mortality

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: Systeme National d'Information et de Gestion Sanitaire (SNIGS) des etablissements du secteur public et de certains etablissements prives 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	Diarrhea	Malaria
Injuries	Cancer	Malaria	Cardiovascular diseases
HIV/AIDS	Malaria	Injuries	Diarrhea
Cardiovascular diseases	Injuries	Diarrhea	Injuries
Neuropsychiatric conditions	HIV/AIDS	Perinatal conditions	HIV/AIDS
Diarrhea	Diarrhea	HIV/AIDS	Cancer
		Neuropsychiatric conditions	

Source: Translated from Adeya et al. (2006)

Systemic Issues

Systemic issues are country specific and affect the whole health system. Systems constraints include the following:

- The degree to which the business environment enables private sector enterprises and service providers to operate
- The capacities of public, private, and civil society organizations to strengthen the health system
- The adequacy of human resources in the health system
- The prevalence of informal payments and/or corruption

The first two of these systemic issues are discussed below. Adequacy of human resources and issues like informal payments are discussed in later modules. See Annex 2.4.C for specific examples of systems constraints.

ENABLING BUSINESS ENVIRONMENT

The HSA team should identify systemic issues that affect sustaining and expanding the overall private sector, such as barriers to private investment and enterprise growth. Research indicates that in many countries, private for-profit health providers are an effective alternative to public sector facilities that lack trained health personnel, essential medicines, or equipment and supplies; in such settings, there is high utilization of the private sector for essential health services. In addition, businesses may provide health services for employees directly or by contributing to health insurance or other financing mechanisms. An environment that is conducive to private sector development can facilitate the expansion of private health service delivery.

The World Bank/ International Finance Corporation (IFC) Enterprise Survey and Doing Business websites offer information on the business climate in 183 economies, in particular the ease of starting, running, and exiting a business. More specifically, Enterprise Survey reports (http://www.enterprisesurveys.org/) give a snapshot of the investment climate of individual countries and comprehensive economy-specific reports. Doing Business reports (http://doingbusiness.org/) rank the economies on the ease of doing business there.

A review of these reports will enable the team to identify the major barriers to doing business, which ultimately may be limiting the private delivery of health services. The team can confirm the barriers during in-country interviews with private health sector actors such as the following:

- Private companies and health care providers
- Chambers of commerce
- Business associations

- Bank managers (specializing in small and medium enterprises)
- NGOs and FBOs (for informal sector and community organizations)
- IFC representative
- Economic Growth Division of the USAID mission in the HSA country

HSS CAPACITIES OF PUBLIC, PRIVATE, AND CIVIL SOCIETY ORGANIZATIONS

The success of HSS activities depends to an extent on the capacity of the organizations that might contribute to strengthening the health system – and not just in terms of providing health care. Without local capacity, HSS efforts will rely on international sources of assistance, which are more costly and lack the same degree of local ownership. The information collected for this section will inform how fast interventions can be implemented and suggest interventions aimed at strengthening capacity.

Table 3.1.2 provides a framework for assessing availability of country capacity to guide and strengthen the health system.

TABLE 3.1.2 FRAMEWORK FOR ASSESSING AVAILABILITY OF CAPACITY TO GUIDE AND STRENGTHEN THE HEALTH SYSTEM

Role and Function	Organization
Leadership to set direction, align stakeholders with the direction, mobilize resources, set standards, and monitor implementation	MOH (e.g., planning department)
Research to provide the evidence for health system changes	Research institutions (e.g., universities, think tanks)
Technical assistance to address specific problems	Consulting firms, NGOs, and universities
Training to develop professionals with expertise in strengthening health systems	Training institutions (e.g., universities)
Advocacy organizations to build support and hold government accountable	NGOs, professional organizations, private sector associations
Standard setting	Professional organizations, MOH

A rapid assessment of the individual staff and organizational capacities of these institutions will provide an overall picture of the degree to which the country can take responsibility for HSS.

Key questions to ask include the following:

- Does the MOH have an unit with overall responsibility for HSS such as a policy and planning department?
  - Does it have high-level support within the ministry?
  - Does it have the mandate, staff, and resources to carry out its functions?

- Are there research institutions with the capacity to provide the evidence needed to inform HSS and health policy reform?
  - How capable are the institutions of carrying out research and studies?
  - Are they able to present the results of the research effectively to policymakers?
- Are there capable consulting firms and NGOs that can be contracted to provide technical assistance in issues related to the six building blocks?
- Is there sufficient capacity in country to train public health leaders in HSS?
  - Where is this capacity – schools of higher education?
  - What specific degrees do they presently offer?
- Is there organizational capacity to advocate for HSS improvements?
  - Where is this capacity within the government?
  - Where is this capacity outside the government?
- Are there organizations that have the capacity to provide norms and standards for health workers and quality of care?

The overall intent of this part of the assessment is to determine if HSS capacity, not just the capacity to deliver health care, exists in the country. If not, it can be included as an area of intervention, albeit over the longer term.

Political and Macroeconomic Issues

This section provides a picture of the macro-level decision-making processes for country policy and programs, the level of resources available in a country, and who controls the resources. It also indicates the opportunities for private sector strengthening and expansion and for innovative financing mechanisms.

This section first describes the political structure of the country, Key issues include:

- How is the head of government elected? Popular vote? Are elections held on a regular basis?
- Is there separation of powers within the government? For example, are the legislative and executive branches independent of each other?
- What is the level of political stability within the country? For example, is the situation calm, or is the country experiencing civil discord or violence?

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.

TIP

Reliable Resources for Economic Indicators

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

http://www.imf.org

http://www.doingbusiness.org/report.

It is also important to provide an overview of the macroeconomic environment. The following questions can serve as a guide:

- Does the country have a market economy? Is it in transition (e.g., from a command to a 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 growth of the gross domestic product (GDP))?
- What is the role of the private sector in the country?
    - Does the government support private sector activity?
    - What is the role of the private sector in health care provision?
    - Does the legal and regulatory framework of the country support the private provision of health care services?
- What is the estimated size of the informal economic sector (usually given 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, the overview should describe the country's general infrastructure: roads, transportation, electricity, and telecommunications.

[2] Informal sector workers are individuals earning income outside of formal employment such as sole entrepreneurs or those 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.

1.2 Description of the Health System

The general description of the health system should include information about who participates in the system, where services are provided, and how the system is managed.

Government, Private, and Civil Society Actors

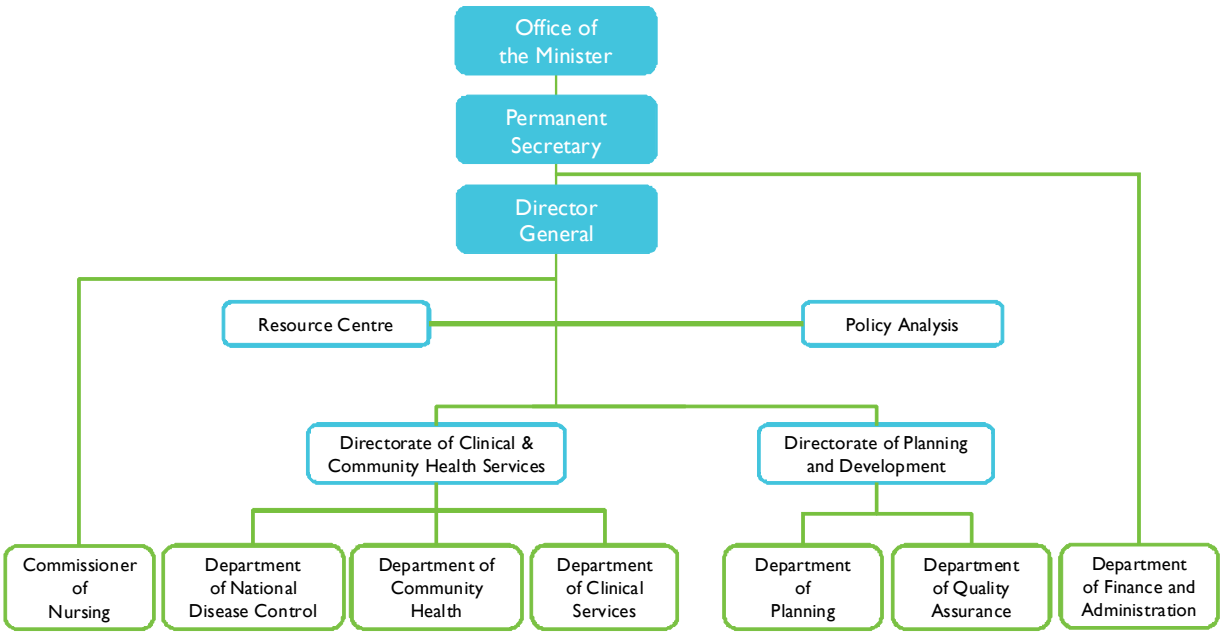
A key to understanding the overall functioning of a health care system is to understand the structure and interaction of the main governmental ministries and private organizations involved in the design and delivery of health services. These are, for example, the MOH, the Ministry of Finance (MOF), other key line ministries, the social security program, health maintenance organizations, private insurance companies, private commercial providers, NGOs involved in service delivery, and other key actors. (See Figure 1.1.3, in Section 1, Module 1, for the range of health system actors.) This analysis will help the HSA team to identify the appropriate stakeholders to consult for this assessment.

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

- Which agencies and organizations (public and private) have mandates that affect the health system?
    - How are the primary sectors of the health system – public, private (both commercial for-profit and NGO/FBO) organized? Is civil society active?
- Which agencies and organizations are in charge of the following functions of the health system: financing, planning, human resource management, service delivery, project implementation, insurance, leadership and governance, information and statistics management, and regulation?
- Try to disaggregate the agencies and organizations responsible for each health system function by the department or division that is responsible for each of these functions. Who heads each of these divisions?
- Who are the executive teams or individuals within these agencies and organizations?

An organogram is a useful way to graphically present the structure of an organization to understand reporting structures, major units/divisions, functions, and levels of accountability. Figure 3.1.1 is an organogram that depicts the structure and relationships of the Ugandan MOH. A report on the Uganda HSA (Ministry of Health, Health Systems 20/20 and Makerere University School of Public Health 2012) is accessible at www.healthsystemassessment.org.

FIGURE 3.1.2 ORGANOGRAM OF THE MINISTRY OF HEALTH OF UGANDA



Source: Ministry of Health, Health Systems 20/20, and Makerere University School of Public Health (February 2012)

Proposed sources of information for this topic should include:

- Ministries' or private organizations' offices. Also consult their websites and publications, if available.
- WHO's International Digest of Health Legislation (WHO 2009b, (http://apps.who.int/idhl-rils/frame.cfm?language=english). The digest and accompanying web-based database describe the MOH organizational structure for selected countries, and where available, provide links to websites that contain the legislation that sets out the structure.

Health Facilities and Services

The service delivery function is a health care system's ability to provide quality services. This section of the overview should 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 Module 4, Service Delivery.

For the HSA team to get a complete picture of the health system's service delivery system, the team leader or coordinator should complete Table 3.1.3, using the most recent information available on the number of health facilities and human resources. Sources of information include health facility or health provider surveys, UN agencies in country, the MOH, and associations of private providers. The table may be customized to suit the country-specific terminology for facilities and workers.

Table 3.1.3 Template: Country's Service Delivery System: Facilities and Human Resources

Setting	Public	Private				Total
		For-profit	Not-for-profit or NGO	FBO	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						

It should be noted that most developing countries do not have data on utilization of private health services (such as outpatient visits and hospital admissions per capita) or supply of services (quantity of providers, market share of each, and composition). For this information, the team leader will have to contact private provider associations to find out how the sector is organized, who its members are, and its role and experiences in partnering with the government or donors. In addition, in many emerging economies, 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. Partnering with informal health providers can be an effective way to reach some target populations and to change behaviors.

Many countries do have 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 show the percentage of total health financing that goes to private sector providers. Utilization data 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 or source of HIV testing). Typically, MOH utilization data cover only public sector providers.

System Management: Level of 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 of a country. It is critical to understand this aspect of the country's health system before starting the assessment, because it shows how the health system is organized and therefore where, that is from which level, different types of data can be collected.

The assessment team's objective will be to identify the responsibilities of the different levels of government with regard to health system functions, which include the following:

- Financing the health system
- Managing human resources in the health system
- Organizing health service delivery
- Implementing programs and projects related to health
- Procuring and distributing pharmaceuticals
- Managing HIS 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, typically in offices in the capital city.

In countries that are more decentralized, responsibilities are devolved, delegated, or divested to provinces, districts, or other agencies. In these cases, the assessment team should focus on obtaining information at the appropriate level of government or other agencies depending on the form of decentralization guiding the health system.

One method that can be used to evaluate the extent of decentralization is to identify for each function the level of responsibility each level of government has for it. The table in Annex 3.1.A can be used as a template to present the results of such an analysis. The rows show the degree of responsibility (that each level of government has for the function. The table can by modified by adding or deleting rows and columns, according to the needs of the assessment or the country's governmental structure.

Annex 3.1.B is an example of a completed table, modified to show the health system responsibilities at the district level in Zambia. It shows that the districts have no power to determine salaries, but have sole responsibility for contracting nonpermanent staff. This means that information on how salaries and benefits are determined would be obtained at the national, or central, level and information about the contracting of health personnel would probably have to come from the district level.

This table can be filled out prior to the in-country data collection phase of the assessment, using information from the secondary source review, and then verified during the meetings with in-country stakeholders. Each building block module provides specific guidance on assessing decentralization.

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. They include 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 other 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.*

1.3 ASSESSMENT INDICATORS

This subsection focuses on overall health in the country – it shows the topical areas into which the indicators are grouped, lists data sources to inform the indicators, discusses how to deal with indicators that overlap with other building block modules, defines the indicators, and, in the "Interpretation" subsection, shows how to work with them. All the indicators found in this module can be easily downloaded from the Health System Database (http://healthsystems2020.healthsystemsdatabase.org/) as described below.

TOPICAL AREAS

The indicators for this module are grouped into nine topical areas (see Table 3.1.4), which include basic health outcomes as well as socio-economic data. The indicators have been chosen to provide background information on the health situation in the assessment country.

TABLE 3.1.4 INDICATOR AND TOPIC MAP FOR HEALTH SYSTEM OVERVIEW MODULE

Topic Area	Indicator Numbers
A. Population dynamics	1–5
B. Income and inequity	6–11
C. Education	12
D. Reproductive health	13–17
E. Mortality	18–21
F. Water and sanitation	22–26
G. Nutrition	27–28
H. HIV, TB, malaria	29–36
I. Immunizations	37–38

Data on all of the indicators, as well as definitions of each, are available from the Health Systems Database (http://healthsystems2020.healthsystemsdatabase.org/). The data for these indicators are drawn from publicly available databases of WHO and other UN agencies, the World Bank, and MEASURE DHS. A list of databases from which the Health System Database draws data is in Annex 3.1.C and an example of the type of country data downloadable from the Health System Database in Annex 3.1.D.

Complete indicator lists for the overview chapter and each subsequent chapter of the report can be accessed via the Health System Assessment website: http://www.healthsystemassessment.com/

ACCESSING THE HEALTH SYSTEM DATABASE

1. *Using your web browser, go to: http://healthsystems2020.healthsystemsdatabase.org/*
2. *Click on the box titled "Data Sets."*
3. *In the three bulleted links at the bottom of the screen, click the first one: Key Health System Indicators by Country and Corresponding Peer Groups.*
4. *Use the drop-down list to select your country of interest.*
5. *Check on or un-check the boxes next to each set of indicators, to create the data set that you want to see.*
6. *Then click on the box titled "get table."*
7. *A table of indicators selected will appear below.*
8. *Select Excel or Word file format to download the file.*

The technical team should examine overall health system performance data for this and subsequent modules before reviewing other secondary sources. This is particularly important if the HSA team is assessing only selected building blocks, because the data provide background information relevant to all areas of the health care system.

The Health System Database also can be used to compare the health system performance and health status of the study country to that of its regional and income-level peers.

Table 3.1.5 presents a complete list of the indicators to include in this section. This table provides the indicator as well as a description of how to interpret and present the indicator data.

TIP

DEFINITIONS OF HEALTH TERMINOLOGY can be found in the following:

- World Bank Health Systems Development: Glossary (World Bank 2010a)
- World Health Organization Terminology Information System: Glossary (WHO 2010b)

TABLE 3.1.5 HEALTH SYSTEM OVERVIEW INDICATORS

Indicator	Definition and Interpretation
A. Population Dynamics	
1. Population total	This indicator is indicative of the magnitude of general health care needs of a country.
2. Population growth (annual %)	Rapid population growth – which dramatically increases the need for food, health care, education, houses, land, jobs, and energy – can inhibit a country's ability to raise the standard of living, especially if government revenues do not increase at a rate that will finance the needs.
3. Rural population (% of total) and urban population (% of total)	The distribution of the population between rural and urban areas is one indicator of a country's level of urbanization. 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.
4. Population ages 0-14 (% of total)	Indicators 4 and 5 generally indicate whether the population is "young" or "old," and therefore the dependence ratio or level, because people in these age groups generally don't participate in the labor force or produce goods or services for the society.
5.Population ages 65 and above (% of total)	
B. Income and Inequality	
6. GDP per capita (constant USD 2,000)	This indicator is a measure of the overall economic wealth of a country (but is 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.
7. GDP growth (annual %)	GDP growth compared to population growth provides a rough indication of whether the resources potentially available for health are increasing or decreasing.
8. Per capita total expenditure on health at international dollar rate	Higher total health expenditure per capita is generally (but not always) associated with better availability and quality of health care.
9. Private expenditure on health as % of total expenditure on health	Private expenditure on health comprises the outlays of insurers and third-party payers other than social security, mandated employer health services and other enterprise-provided health services, nonprofit institutions and NGO-financed health care, private investments in medical care facilities, and household out-of-pocket spending.
10. Out-of-pocket expenditure as % of private expenditure on health	This indicator provides information on the burden of health care financing on households and the level of financial protection prevailing in the country. In most transitioning and 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, access, and efficiency.
11. GINI index	This is a measurement of the income distribution of a country's residents and helps to define the gap between the rich and poor. 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.
C. Education	
12. Adult literacy rate (%)	Adult literacy rate is the percentage of people ages 15 and above who can, with understanding, read and write a short, simple statement on their everyday life. This indicator demonstrates the level of basic education among average citizens and whether they can understand health literature.

Indicator	Definition and Interpretation
D. Reproductive Health	
13. Contraceptive prevalence (% of women aged 15-49)	These indicators show the utilization of reproductive health services for women; availability and accessibility are key components. Low antenatal care (ANC) rates implies limited access to services because services are not available or are not promoted, or require high out-of-pocket expenditures (the last limiting the access to low-income households). Low utilization levels may also reflect weak demand for ANC.
14. Unmet need for family planning	
15. Fertility rate, total (births per woman)	
16. Pregnant women who received 1+ antenatal care visits (%)	
17.Pregnant women who received 4+ antenatal care visits (%)	
E. Mortality	
18. Life expectancy at birth, total (years)	This is a common indicator of the quality of the health system; countries with low life expectancy generally are perceived as having weaker health systems than those with longer life expectancies.
19. Mortality rate, infant (per 1,000 live births)	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.
20. Mortality rate, under age five (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.
21. Maternal mortality ratio (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.
F. Water and Sanitation	
22. Population with sustainable access to improved drinking water sources (% of total)	Almost half the people in the developing world have one or more of the main diseases or infections associated with inadequate water supply and sanitation: diarrhea, intestinal helminth infections, dracunculiasis, schistosomiasis, and trachoma. "88% of diarrhoeal disease—the second leading cause of death in children younger than five years after respiratory illnesses—is attributed to unsafe drinking water, inadequate sanitation, and poor hygiene. Diarrhoea morbidity is reduced by around 21% through improved water supply and by around 37% through improved sanitation" (Bartram et al. 2005).
23. Diarrhea prevalence of children under five years old (%)	
24. Diarrhea treatment (%)	
25. Improved water sources (%)	
26. Proportion of population with access to improved sanitation	
G. Nutrition	
27.Percentage of children under age five with low height for age (stunting)	In poor countries, maternal and child under-nutrition is the underlying cause of more than one-third (3.5 million) of all deaths of children under the age of 5 years; many of these deaths are preventable through effective nutrition interventions operating at scale. "Pregnancy to age 24 months is the critical window of opportunity for the delivery of nutrition interventions. If proper nutrition interventions are not delivered to children before the age of 24 months, they could suffer irreversible damage into their adult life and to the subsequent generations" (The Lancet n.d.) http://tc.iaea.org/tcweb/abouttc/tcseminar/Sem6-ExeSum.pdf)
28. Percentage of children under age five with low weight for age (underweight)	

Indicator	Definition and Interpretation
H. HIV, TB, and Malaria	
29. Prevalence of HIV, total (% of population age 15-49)	A high prevalence of HIV/AIDS or TB indicates a high burden on the health care system (in terms of infrastructure, staff, financing needs, and other factors).
30. HIV prevalence among pregnant women age 15-24*[a]	
31. Pregnant women tested for HIV during ANC visit (%)	
32. Antiretroviral therapy coverage among people with advanced HIV infection	
33. TB prevalence, all forms (per 100,000 population)	
34. Proportion of TB cases detected and cured under DOTS*	
35. Prevalence and death rates associated with malaria*	
36. Children under five sleeping under insecticide-treated bed nets	The team may want to consider the percentage of pregnant women who sleep under treated bed nets as well
I. Immunizations	
37. Measles coverage (proportion of one-year-old children immunized against measles)	More than 95% of measles deaths occur in low-income countries. Measles vaccination resulted in a 78% drop in measles deaths worldwide between 2000 and 2008. http://www.who.org
38. DTP3 immunization coverage: one-year-olds immunized with three doses of diphtheria, tetanus toxoid (DTP3) and pertussis (%)	Rates of immunizations for DPT3 are an indicator for primary care service availability and coverage.

[a] Indicators marked with asterisk (*) are not yet available on the Health Systems Database, but are recommended by the UN Development Group (2003).

1.4 Health Strategies in the Research Country

An element critical to the success of an HSA is understanding how the findings and recommendations fit into the research country's existing national health strategy and implementation plans as well as its strategies for each of the health system building block areas.

One way to examine the health system's strengths and weaknesses is to compare the HSA data to the goals set out in the national health strategy. Questions to ask include:

- Have all the elements of the country strategy been implemented?
- Is the country meeting goals for improving health system outcomes? Why or why not?
- Is there political will to achieve the strategy and desired goals?
- How has the private sector been engaged?

1.5 DONOR SUPPORT FOR HEALTH SYSTEM STRENGTHENING

Donor support for HSS can be examined by asking two key questions:

- Are donors providing sufficient support in the most needed areas to address the research country's HSS challenges?
- Are donors working together and harmonizing their resources?

These two questions can be addressed by mapping current donors and their respective roles and then looking at their level of coordination.

DONOR MAPPING

Donor mapping is essential to identifying the different actors and their involvement and responsibilities in the health care systems and to recommending priority interventions at the end of the assessment. Donors can play a major role in the health system financing, advocacy, technical support, or delivery of services and goods. Table 3.1.6 is an example of a donor mapping matrix.

Doing donor mapping can be time consuming, so assessment teams should ask if a recent donor mapping of the health system support is available. If so, and the information is still current, the team need not do their own mapping.

TABLE 3.1.6 DONOR MAPPING MATRIX, ANGOLA (2005)

Donor	Field of Intervention and Activities	Timeline and Duration	Amount of Commitment	Project Location	Counterpart
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),	National level	MOH
European Union	At the national level, strengthening blood bank system	2004–2007	USD 28 million (approved)	Luanda, Benguela, Huila, Huambo, Bie	
	At the provincial level, support national rehabilitation program	2003–2007	Euro 14 million	Provinces	

Source: Connor, Rajkotia, Lin, et al. (2005)
Note: This example is shortened for training purposes. It does not include all donors.

In completing the donor mapping matrix, follow these steps:

1. List the donors involved in the health system 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, mission, 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 to 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)
- Grant applications: A donor mapping analysis is part of the application process for a PEPFAR or Global Fund grant. If the country being assessed has received a grant, the team can consult the country's application proposal, obtainable from the following websites:
    - PEPFAR: http://www.pepfar.gov/budget/partners/index.htm
    - Global Fund: http://www.theglobalfund.org/en

The donor mapping will also be useful for comparing donor-to-government interventions, particularly in identifying gaps and overlaps in health care interventions and financing or in determining if donor funding is in line with the MOH's strategies and interventions.

Table 3.1.7 continues the example of Angola. It 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 3.1.7 COMPARISON OF DONOR AND GOVERNMENT INTERVENTIONS IN THE HEALTH CARE SYSTEM IN ANGOLA (2005)

Interventions	Donors				MOH	
	WHO	UNICEF	EU	Global Fund (UNDP)	Strategic Plan for the Accelerated Reduction of MMR and IMR	Sector Development Plan 2002–2005
National health policy and strategy	X		X	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.	X	X
Norms and protocols	X	X	X			
Increase integration and coordination between the vertical public health and the provincial health directorates		X	X		X	
Basic or financial management training or both		X	X		X	
Clinical training	X	X			X	
Provincial supervision of municipalities		X			X	
Mapping all health facilities in the municipalities		X	X		X	
Health profile of municipal population					X	

Source: Connor, Rajkotia, Lin, et al. (2005)
Note: EU = European Union; UNDP = United Nations Development Programme; MMR = maternal mortality ratio; IMR = infant mortality rate

DONOR COORDINATION

Once donors are identified, the HSA team should assess the level of coordination among the donors (in the form of joint monitoring teams, joint high-level meetings, donor coordination bodies, and so forth) and between donors and local governments. Inconsistent donor policies and practices impose burdens on partners, whereas coordination can enhance the effectiveness of aid, and ultimately 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.

To assess the level of coordination and alignment between the government and donor, the team needs to get answers to the following questions:

- Do the donor country programs draw 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.
- To what extent is the private sector included in coordination efforts?
- Is the government or any other organization engaged in leadership of the consultative institutions, by organizing and chairing consultative groups, meetings, and working groups, and by providing a secretariat? If the government is leading this process, it requires adequate staffing, resources, and an appropriate location within the government structure. Who is financing these structures, if they exist?
- Is there a SWAp among the government and development partners? A 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 system 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

To assess the level of coordination among donors themselves, the team needs to get answers to the following questions:

- Do donors share information on activities 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 donors, and among donors.

1.6 Assessment Report Checklist: Country and Health System Overview

❒ Overview of the Health System and the Country Context

A. Health issues (can include):

1. Major causes of mortality and morbidity
2. Diseases that have the highest disability adjusted life years (DALY)
3. Burden of disease (HIV/AIDS, malaria, reproductive health, and child health)
4. Sex and age groups
5. Urban vs. rural

B. Systemic issues (can include):

1. Enabling business environment
2. Capacities of public/private, and civil society organizations to strengthen the health system

C. Political and macro-economic Issues

❒ The Management Structure of the Health System

A. Government, private, and civil society actors

B. Health facilities and services

Table – Facilities and Human Resources Sample Table

C. Structure of system

D. Health conditions in research country

E. Health system overview indicators

F. Health strategies

❒ Donor Support for Health System Strengthening

A. Donor mapping

B. Table Donor map

C. Donor coordination

NOTES