

## CHAPTER 8 HEALTH SERVICE DELIVERY MODULE

### 8.1 Overview

This chapter presents the health delivery module of the assessment. Section 8.1 defines health service delivery and its key components. Section 8.2 provides guidelines on preparing a profile of health service delivery for the country of interest, including instructions on how to customize the profile for country-specific aspects of the health delivery process. Section 8.3 presents the indicator-based assessment, including detailed descriptions of the indicators. Section 8.4 discusses how to summarize the findings and develop recommendations.

#### **8.1.1 What Is Health Service Delivery?**

The World Health Organization (WHO) defines *service delivery* as the way inputs are combined to allow the delivery of a series of interventions or health actions (WHO 2001b). As noted in the *World Health Report 2000*, “the service provision function [of the health system] is the most familiar; the entire health system is often identified with just service delivery.” The report states that service provision, or service delivery is the chief function the health system needs to perform (WHO 2000). As such, Figure 8.1 (see also Chapter 1, Figure 1.1) shows the relationship between service delivery and the other modules of this health systems assessment and their relationship with health system objectives.

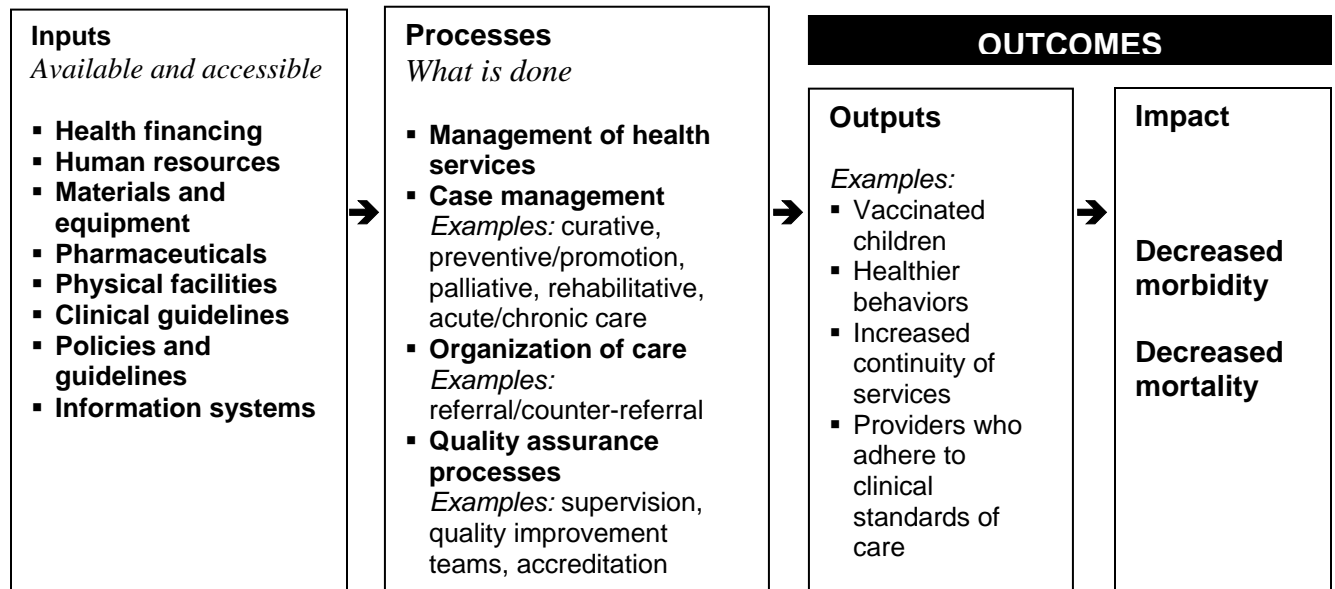
Because of the limited time to conduct this assessment, more emphasis will be placed on personal health (as opposed to public health) services and service delivery functions at the subnational level (i.e., the district, hospital, health center, health post, and dispensary levels). Health sector planning is covered in the Governance module, Chapter 6. For the purposes of this assessment, the private sector role in service delivery will refer to the following—

- For-profit (commercial) and nonprofit (nongovernmental organization [NGO] or U.S. Agency for International Development [USAID] Mission) formal health care providers, including hospitals, health centers, and clinics
- Traditional and informal practitioners, including traditional midwives and healers
- Any membership organizations for such providers such as professional associations or unions
- Private companies who may take actions to protect or promote the health of their employees (such as company clinics or health education programs)

#### **8.1.2 How Do Health Service Delivery Systems Work?**

Health service delivery can be represented in a system’s perspective, with inputs, processes, outputs, and outcomes (see Figure 8.1). Some of the core inputs that are deemed necessary for health care delivery are financial resources, competent health care staff, adequate physical

facilities and equipment, essential medicines and supplies, current clinical guidelines, and operational policies. These inputs must be available and accessible to have an impact. They also must be used to properly carry out the system processes to produce desired health outcomes. Note that several of the categories of inputs in Figure 8.1 are covered in separate modules, so a few of the indicators will be used for more than one module. This overlap will be noted in the text, so if both modules are being conducted simultaneously, you should coordinate the collection of data for those indicators.



Source: Adapted from Massoud and others (2001).

Figure 8.1 Systemic View of Service Delivery

## 8.2 Developing a Profile of Service Delivery

Before identifying the strengths and weaknesses of the service delivery system, you need to understand how it works. You can gain this understanding by constructing a profile of the service delivery system. Because of the short time frame for this assessment, the information gathering for the profile and the rest of the assessment will need to occur simultaneously. Information for the profile can be derived from the Core Module, other reports, or key informant interviews.

A profile can be described in both narrative and graphic forms. The best approach for this assessment will depend on what information is available, including preexisting graphics. Table 8.1 presents some topics that can help to describe the system in narrative form.

**Table 8.1 Describing the Health Service Delivery System**

Topics	Observations and Examples
<b>Inputs</b>	
Size of the public health delivery system—both infrastructure and human resources	<ul style="list-style-type: none"> <li>• Do public facilities cover all areas of the country?</li> <li>• Do existing facilities have the equipment and medicines to be functional?</li> <li>• Where are the major gaps?</li> <li>• Are human resources sufficient?</li> <li>• How do human resources vary by cadre and region?</li> <li>• Are human resources constrained by limited preservice training slots, low salaries or poor deployment to underserved areas, loss of staff to the private sector or overseas, or insufficient in-service training to enhance skills?</li> </ul>
Size of the private health delivery system (not included in Figure 8.2) and its relationship to the system mapped	<ul style="list-style-type: none"> <li>• Are private providers located in many areas of the country or just concentrated in the capital city?</li> <li>• Which are the predominant providers (for-profit, USAID Mission, NGO), and what is the type of facility or cadre (e.g., private clinic, drug shop, traditional birth attendant)?</li> </ul>
Structure of service delivery system	Describe the structure of service delivery— <ul style="list-style-type: none"> <li>• In the public and private sectors—including the levels of service delivery, number of health areas, health regions, health districts</li> <li>• In the private sector types of health facilities and any organizing structures</li> </ul>
<b>Processes</b>	
Structure and composition of the management and supervisory actors in the health delivery system, their roles and responsibilities	<ul style="list-style-type: none"> <li>• Describe the key central level divisions, midlevel health authority, and integrated management or supervisory team</li> <li>• Which authority is responsible for decision making, technical direction, management, and coordination of area activities?</li> <li>• It may be appropriate to describe decentralization in this section (see the Governance module, Chapter 6)</li> </ul>
Inventory of Ministry of Health (MOH) national level programs, with information about geographical/eligibility scope, corresponding service statistics from the core module, policy	What are the MOH vertical programs?
Role of local administrative government and community organizations in service delivery and its relationship with health authority	Describe the role, if any, for local government authorities with respect to health services delivery. For example, in one country, the regional health authority may be simply a division of the social service department and have low capacity in public health or medicine. In another country, the mayor may financially support municipal-wide campaigns (separately from MOH support).
Unusual particularities of the system	Describe any unusual aspects of the health delivery system (e.g., in the Angola systems assessment, the collection of service delivery data was conducted by the local government authority, divorced from the health supervision function).

A service delivery system can be graphically represented in a number of ways. A health sector pyramid can show the central, intermediate, and peripheral levels of care, number of facilities at each level, and management of care. The example from Angola in Figure 8.2 illustrates the number of facilities by level. Mapping can provide an efficient way of understanding the relationship between the major actors within a service delivery system.

**Tip!**  
To identify MOH divisions relevant to service delivery, organizational charts of subdivisions of the MOH that are not represented in the overall organizational MOH chart may be helpful.

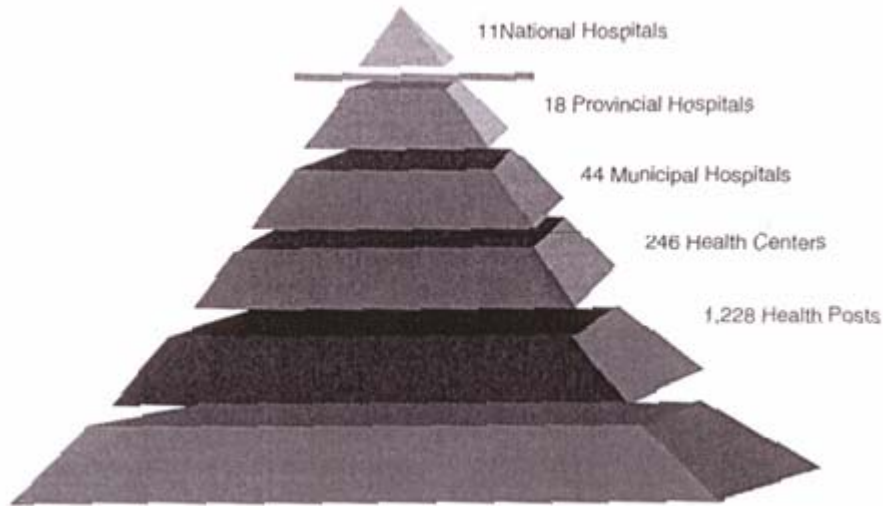


Figure 8.2 Sample Health Sector Pyramid from Angola Health System

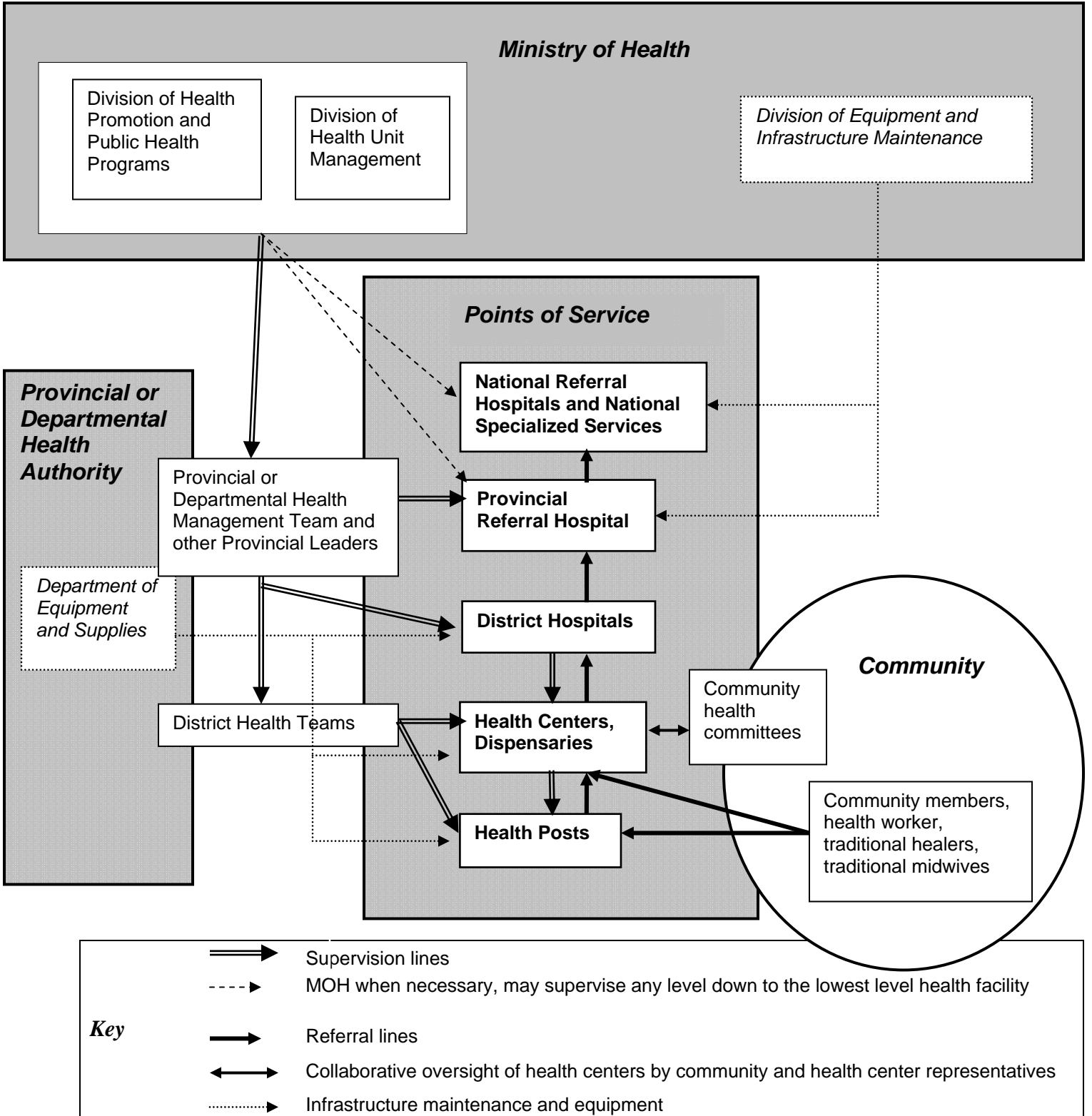
Figure 8.3 is a sample map of a health service delivery system that depicts the following—

- MOH divisions and subdivisions that directly support service delivery by defining national clinical guidelines, training, and supervision. These divisions often receive external support. This support might include both divisions that focus on a clinical or a client-specific area (e.g., infectious diseases, vaccine preventable diseases, reproductive health, nutrition, mental health, child health, maternal health) and divisions that directly focus on service provision (e.g., health services, quality assurance, management of health units, traditional medicine).
- Subnational government divisions (e.g., provincial or district health authorities) that support service delivery through planning, monitoring, resource allocation, supervision, or any combination of those elements.

**Tip!**  
If your assessment needs to focus on certain aspects of the system that cannot be represented in one map (e.g., if the mission is particularly interested in TB, a focus on the laboratory services would be warranted), including a second map may provide more clarity than creating a super-map.

- Health facilities such as hospitals (national, provincial, district, municipal), health centers, health posts, dispensaries, maternity centers, and laboratories. Ideally, the level of care (primary, secondary, tertiary) is also depicted.
- Formally defined community structures (e.g., health committees) or workers that have health responsibilities
- Lines of supervision (MOH divisions; regional, provincial, district health department, or other division)
- Lines of patient referral or counterreferral

Once the service delivery map is completed, we recommend describing in greater detail those important parts of the system not captured by the map. Compare how the service delivery system is supposed to work with how it actually works. Identify where service delivery is falling short of plans and why.



Source: Ministry of Health, State of Eritrea (2005).

Figure 8.3 Example of a Service Delivery System Map of a Hypothetical Country

### 8.3 Indicator-based Assessment

In this section you will identify strengths and weaknesses of the system as you continue to describe the service delivery system. The *topical area* describes what health delivery issue you will assess; the *indicators* will help to support your findings about a particular aspect of the health system. The indicators were selected based in part on the feasibility of obtaining the information given the scope of the assessment and on what aspects of the assessment are quantifiable. Do not expect to draw conclusions about a topical area from the indicators *alone*. The indicator data should be supplemented with additional information. Ideas for probe questions may be found in the “Issues to explore” section under each indicator, embedded in the definition of a topical area.

Specific indicators were not prescribed for all subtopical areas because a significant portion of this assessment will be based on existing documents. In such cases, this flexibility allows you to simply use whatever available indicators or other evidence of subtopical areas you identify during document review.

Please note that although parts of this section are phrased in the form of questions, they are suggestions of information to find in reports and interviews to help assess the topical area. Thus, they are not intended to be used as a questionnaire.

#### 8.3.1 Topical Areas

This service delivery assessment is organized into the following topical areas—

- A. Availability of Service Delivery (Component 1)
- B. Service Delivery Access, Coverage, and Utilization (Component 1)
- C. Service Delivery Outcomes (Component 1)
- D. Availability of Service Delivery (Component 2)
- E. Service Delivery Access, Coverage, and Utilization (Component 2)
- F. Organization of Service Delivery (Component 2)
- G. Quality Assurance of Care (Component 2)
- H. Community Participation in Service Delivery (Component 2)

#### Tip!

##### Data collection

*Information gathering.* This assessment focuses on deriving conclusions based on information gathered from existing reports, key informant interviews, and one or two facility visits. Since the assessment report will be used as a reference document, keep track of information sources. The scope of this assessment may not allow for conclusions to be drawn for the entire system; in such cases, describe what *is* known about sections of the system you *do* know something about. For instance, if an indicator is available for only certain regions where a household survey was held, note what regions are represented and then try to infer whether those regions might represent a better or worse snapshot compared to the rest of the country.

*Preparation.* Start by reading and analyzing key country documents about the service delivery system, including—

- MOH legal and policy documents relevant to service delivery (i.e., which focus on subnational level of health system)
- WHO (e.g., *World Health Report 2000* on health system attainment and performance), the World Bank, United Nations Children’s Fund (UNICEF) multiple indicator cluster surveys, and reports written by bilateral donors and other country partners
- USAID and other U.S. government-funded work (see <[www.dec.org](http://www.dec.org)>)

### **8.3.2 Health Service Delivery Assessment Indicators**

Table 8.2 groups indicators in this module by topical area.

**Table 8.2 Indicator Map—Health Service Delivery**

<b>Component</b>	<b>Topical Area</b>	<b>Indicator Numbers</b>
Component 1	Availability of Service Delivery	1
	Service Delivery Access, Coverage, and Utilization	2–5
	Service Delivery Outcomes	6–9
Component 2	Availability of Service Delivery	10–13
	Service Delivery Access, Coverage, and Utilization	14–19
	Organization of Service Delivery	20–23
	Quality Assurance of Care	24–28
	Community Participation in Service Delivery	29–31

8.3.2.1 Component 1

The data for the indicators in this section are drawn mainly from existing and publicly available international databases from the World Bank and WHO, as well as from National Health Accounts (NHA). Data for all Component 1 indicators are provided in an electronic format (available on the CD accompanying this manual or downloadable from the data source listed for each indicator). Compile the Component 1 data of this module according to the instructions in Chapter 5 (Box 5.1).

**A. Availability of Service Delivery**

**1. Number of hospital beds (per 10,000 population)**

**Definition, rationale, and interpretation** [(Total number of beds in hospitals of all levels) / (Population of country)] × 10,000

Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases, beds for both acute and chronic care are included. Inpatient bed density serves as proxy for availability of health service delivery.

A greater number of hospital beds suggests greater availability of inpatient health services. Conversely, some countries (e.g., Organisation for Economic Co-operation and Development) have witnessed a downward trend in hospital beds per 10,000 population as outpatient surgery increases.

**Suggested data source** WHO (2006b). The World Health Report 2006 <www.who.int> or most recent  
Additional sources:  
WHO (2006a). *Services Availability Mapping*. <www.who.int> or most recent

**Issues to explore** If a country defines *useable* hospital beds for this indicator (for instance, beds without mattresses), explain. Compare with regional average. Assess the trend. Is there over- or under-capacity?

**Notes and caveats** Consider validating these data in-country at the MOH division that inspects and licenses facilities or at the statistical or planning division that compiles and analyzes service delivery data.

## **B. Service Delivery Access, Coverage, and Utilization**

### **2. Percentage of births attended by skilled health personnel per year**

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**Definition, rationale, and interpretation**

[Number of women aged 15–49 attended during childbirth by skilled health personnel]/[Total number of women aged 15–49 surveyed with a birth in previous year]

This indicator measures coverage as well as utilization. A skilled birth attendant is a licensed or certified health professional, such as a midwife, doctor, or nurse, who has been educated and trained to proficiency (1) in the skills needed to manage normal (uncomplicated) pregnancies, childbirth, and the immediate postnatal period, and (2) in the identification, management, and referral of complications in women and newborns. Traditional birth attendants, trained or not, are excluded from the category of skilled attendant at delivery.

As the point of contact with women, health services statistics are the main and most obvious routine source of information for the numerator. Nevertheless, health service information used on its own constitutes a poor source of statistics on coverage of care because it is often incomplete due to inadequate reporting or exclusion of private sector information. Data from household surveys are also used. Census projections or, in some cases, vital registration data are used to provide the denominator (numbers of live births).

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**Suggested data source**

World Bank. (2006b). World Development Indicators  
<[www.worldbank.org](http://www.worldbank.org)> or most recent

Additional sources:  
Measure DHS (2006). “Demographic and Health Surveys”  
<[www.measuredhs.com](http://www.measuredhs.com)> or most recent

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**Issues to explore**

The indicator may be defined slightly differently, depending on the source. If data are not available, alternative indicators might be (1) the estimated proportion of pregnant women who had at least one prenatal visit, and (2) the proportion of deliveries taking place in health facilities, also available through Measure DHS (2006).

Assess the trend and compare with regional average. Explore with key informants and document review whether supply or demand needs to be improved to increase utilization of skilled attendants.

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**Notes and caveats**

Consider validating these data in-country at the MOH statistical or planning division that compiles and analyzes service delivery data.

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**3. DPT3 immunization coverage: one-year-olds immunized with three doses of diphtheria, tetanus toxoid, and pertussis (DPT3) (%)**

**Definition, rationale, and interpretation** [Number of 12–23-month-old children receiving DPT3 vaccine before first birthday] / [Total number of children aged 12–23 months surveyed]

DPT coverage is often used as a proxy for health system performance, justified on the grounds that DPT3 requires three visits to a health care facility, thus allowing one to distinguish between contact and effective coverage. Vaccine coverage can also be considered a measure of utilization of health services.

**Suggested data source** WHO (2006b). *The World Health Report 2006*  
<www.who.int> or most recent

**Issues to explore** Assess the trend and compare it with the regional average. Are trends and levels similar to the percentage of births attended by skilled birth attendant (indicator 2)? If these two indicators suggest very different utilization rates, consider other indicators of utilization, such as the average number of hospital discharges for 1,000 inhabitants, which focuses on inpatient health care services.

**Notes and caveats** Consider validating these data in-country at the MOH statistical or planning division that compiles and analyzes service delivery data.

**4. Contraceptive prevalence (% of women aged 15–49)**

**Definition, rationale, and interpretation** The percentage of women aged 15–49 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).

*Module link:* Core Module, indicator 4 (contraceptive prevalence rate)

**Suggested data source** World Bank (2006b). *World Development Indicators*  
<www.worldbank.org> or most recent

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#### **5. Pregnant women who received 1+ antenatal care visits (%)**

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**Definition, rationale, and interpretation**      The proportion of women who had one or more antenatal care (ANC) contacts during their last pregnancy in the five years before the most recent survey conducted in that country, as well as the proportion of women who had four or more visits

This indicator shows utilization of reproductive health services for women, of which 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 may also reflect weak demand for prenatal care.

*Module link:* Core Module, indicator 6 (pregnant women receiving 1+ and 4+ antenatal visits %)

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**Suggested data source**      WHO (2006b). *The World Health Report 2006*  
<[www.who.int](http://www.who.int)> or most recent

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### **C. Service Delivery Outcomes**

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#### **6. Life expectancy at birth, total (years)**

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**Definition, rationale, and interpretation**      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.

*Module link:* Core Module, indicator 8 (life expectancy at birth, total years)

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**Suggested data source**      World Bank (2006b). *World Development Indicators*  
<[www.worldbank.org](http://www.worldbank.org)> or most recent

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#### **7. Mortality rate, infant (per 1,000 live births)**

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**Definition, rationale, and interpretation**      The number of infants who die before reaching one year of age, 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 prenatal and postnatal care.

*Module link:* Core Module, indicator 9 (infant mortality rate, under 5, per 1,000)

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**Suggested data source**      The World Bank (2006b). *World Development Indicators*  
<[www.worldbank.org](http://www.worldbank.org)> or most recent

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**8. Maternal mortality ratio (per 100,000 live births)**

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**Definition, rationale, and interpretation**

The number of maternal deaths that occur during pregnancy and childbirth per 100,000 live births. It is a measure of the likelihood that a pregnant woman will die from maternal causes.

This indicator is a measure of the availability and accessibility of reproductive health services, particularly of the extent of use of modern delivery care.

*Module link:* Core Module, indicator 11 (maternal mortality ratio, per 100,000 live births)

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**Suggested data source**

WHO (2006b). *The World Health Report 2006*  
<[www.who.int](http://www.who.int)> or most recent

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**9. Prevalence of HIV, total (% of population aged 15–49)**

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**Definition, rationale, and interpretation**

Percentage of adults who are infected with HIV

A high prevalence of HIV/AIDS indicates a high burden on the health care system (for example, in terms of infrastructure, staff, financing needs).

*Module link:* Core Module, indicator 7 (HIV prevalence, total, % of population aged 15–49)

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**Suggested data source**

World Bank (2006b). *World Development Indicators*  
<[www.worldbank.org](http://www.worldbank.org)> or most recent

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### 8.3.2.2 Component 2

#### D. Availability of Service Delivery

According to the WHO, *availability coverage* refers to the proportion of people for whom sufficient resources have been made available, the ratio of human and material resources to the total population, and the proportion of facilities that offer specific resources, equipment and materials, and other health service delivery necessities (WHO 2001a). In other words, it is the degree to which health facilities that are functional, adequately staffed, equipped, and supplied are available to the population in a country.

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#### 10. Number of primary care facilities in health system per 10,000 population

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<b>Definition, rationale, and interpretation</b>	<p>[Simple count of primary health centers, health posts, and dispensaries in-country] / [Most recent population estimate × 10,000]</p> <p>Report for both private and public sectors if data are available.</p> <p>Availability coverage is the ratio of resources (defined here as number of primary care facilities) to the total population. Although few benchmarks are available, a comparison with key neighboring countries may be instructive.</p>
<b>Suggested data source</b>	<p>MOH documents (e.g., health services department) and other documents recommended by the USAID Mission local consultant and stakeholders interviewed</p>
<b>Stakeholders to interview</b>	<p>MOH official or department responsible for licensing, maintaining, equipping, and planning the building of facilities</p>
<b>Issues to explore</b>	<p><i>Urban-rural distribution.</i> If available, the distribution of public primary care facilities among rural and urban health districts is a measure of equity in access. Try to obtain population estimates for rural and urban areas to compare the ratio of resources to the total population. If information is unavailable for urban-rural distribution, inquire whether regional differences are available and whether these regions can be generally accepted to be classified as overall urban or rural.</p> <p>If the rural-urban distribution is extremely skewed, you can examine recent budget expenditures and workplans to see if they contain line items or plans for capital investments, particularly for the building of new facilities. If enough detail is available, are new facilities planned in rural areas compared to urban zones? Beyond rural-urban disparities, you may find other regional disparities that are worth noting.</p> <p>If estimates of total numbers of non-hospital facilities in the private and NGO sector are available, they will provide this information because they are part of the health delivery system, even if the information is available only for certain regions of the country.</p> <p><i>Percentage of facilities that are functional.</i> In some cases (e.g., post-conflict), facilities may exist but they may not be functional.</p>

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**11. Percentage of primary care facilities that are adequately equipped**

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<b>Definition, rationale, and interpretation</b>	<p>[Number of adequately equipped facilities]/[Total number of facilities]</p> <p>Report for both private and public sectors if data available.</p> <p>This indicator presumes that country standards dictate the minimum equipment that facilities at each level of care should have available and that an MOH division is responsible for monitoring the inventory of physical facilities. The standard should be obtained directly from the MOH division and may include standards or conditions other than presence of certain equipment (e.g., materials, electricity, running water, and laboratory services), in which case this situation should be explained.</p> <p>Adequately equipped facilities ensure that the full range of services is available to clients. The absence of such standards or MOH division in of itself would indicate lack of management capacity of the system.</p>
<b>Suggested data source</b>	<p>MOH facility survey, if one exists</p>
<b>Stakeholders to interview</b>	<p>MOH official or department responsible for licensing, maintaining, equipping, and planning the building of facilities</p> <p>Confirm that MOH information is in line with interviews with facility supervisors during field visit. Supervisors may be most qualified to answer, as they conduct facility visits on a regional basis.</p>
<b>Issues to explore</b>	<p>How does the condition of the facilities affect the availability of service delivery?</p> <ul style="list-style-type: none"><li>• Consult with the pharmaceuticals assessor: what proportion of facilities has adequate supplies of pharmaceuticals?</li><li>• What proportion of facilities is adequately staffed (see Human Resources module)?</li><li>• What is the availability of telephones and other means of communication between levels of care? (This information will help to assess continuity of care later in this section.)</li><li>• What is the availability of ambulances or other forms of transport between levels of care? (Again, this information will help to assess continuity of care later in this section.)</li><li>• Explore why facilities are not adequately equipped.</li></ul>

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**12. Availability of updated clinical standards for MOH priority areas, high burden diseases areas, and/or areas responsible for high morbidity and mortality**

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**Definition, rationale, and interpretation**

[Number of clinical areas that have national guidelines updated within the last three years among clinical areas identified in denominator]/[Number of clinical areas identified as priority areas by the MOH or which carry high morbidity or mortality in the country] × 1,000 *Note:* If the MOH has assessed the need for updating clinical standards for an area and it has been deemed unnecessary, this effort should count as updated.

Although the existence of national standards does not imply that standards are known or employed by providers, the first step in assuring the quality of clinical services is to define what standards will be used to define the target level of quality.

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**Suggested data source**

Start by identifying the main MOH subdivisions that focus on a disease area or a set of diseases (e.g., child or maternal health). According to available data, which of these represent the highest morbidity and mortality rates? See the Core Module, which also includes some service delivery output measures. What are some of the main challenges to the development or use of clinical standards (or both)?

Next try to determine independently what the MOH considers its priority focus areas, and add these to the list.

Finally, find out how recently standards have been updated for each of the areas in your final list.

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**Stakeholders to interview**

MOH statistics, analysis, and planning divisions; MOH programmatic divisions or subdivisions

WHO and bilateral donors because developing and providing training in clinical standards is often externally funded

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**Issues to explore**

As you meet MOH program directors and facility staff, especially for those areas of particular interest (i.e., those that carry greater burden of disease or which the MOH is interested in), assess whether standards are used in in-service training, whether they are available at private as well as public facilities, and how they are used in supervision. Determine how the availability or lack of standards affects the availability of priority services.

Is a minimum package of services available? What proportion of facilities can offer the minimum package of services if one is defined? A minimum package of services defines what basic health services the health system decrees should be offered at a particular level of care. The absence of this package suggests the health system does not have a way of verifying whether basic health needs are offered at each level of care.

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**13. The ratio of health care professionals to the population**

Indicator 13 is a Component 1 indicator from the Human Resources module (indicator 1). If both modules are being assessed simultaneously, only one person needs to collect the data but that data should be reflected in the conclusions from both modules. In addition, the issue is covered in the Core Module, Chapter 5.3.4 (Structure of government and private sector involved in health care.)

**13. The ratio of health care professionals to the population**

**Definition, rationale, and interpretation** The ratio of doctors, nurses, midwives, pharmacists, and laboratory technicians per 10,000 population

A low number means a particular cadre does not have enough service providers. This information should be collected for the private sector too, if available.

**Suggested data source** MOH data

WHO, *World Health Report*.

*Module link:* Human Resources, indicator 1 (ratio of health care professionals to the population, per 10,000)

**Stakeholders to interview** MOH central level human resources or planning

**Issues to explore** Explore the distribution of clinical providers at the primary care level compared to the hospital level, across regions and by cadre. Is appropriate or minimum staffing by facility level defined by a policy or legal standards? If so, how does actual staffing compare to these standards?

Has a human resource capacity analysis been done, aimed at determining the ability of the country to fill its human resource needs in the future?

Too low a number can mean educational institutions are not producing enough graduates or they may be dying (e.g., due to high prevalence of HIV/AIDS) or leaving the country (the so-called brain drain). “Internal emigration” or a loss of government staff to the private sector can be a problem for the public sector, although it does not necessarily reduce human resources available in country. Compare by regional norms from other countries or WHO standards; look at the Core Module.

The distribution of human resources personnel is important for the availability of health services; when in-country, look more deeply into it if possible. Look at numbers in hospitals vs. other facilities—often doctors are clustered in hospitals. Even with high numbers of providers in urban areas, rural areas may be underserved.

## E. Service Delivery Access, Coverage, and Utilization

*Service delivery access* refers to the ability of a population to reach appropriate health services. (In this assessment, the WHO-defined concepts of accessibility, coverage, and acceptability coverage have been combined.) Various factors can reduce access, including presence of geographical and transportation barriers, lack of financial resources, or lack of cultural appropriateness. *Effective coverage* refers to the proportion of the population in need of an effective intervention that actually received the intervention. The *utilization rate* refers to the number of times per year the population uses health services. The utilization of health services represents effective access to health care, assumed to be the result of the interaction between supply and demand factors (Acuña and others 2001).

There are various indicators of utilization; among the most common are the number of outpatient visits per person per year and the number of hospital admissions per 100 persons per year, coverage of prenatal care, coverage of professional childbirth delivery, and coverage of immunizations (Acuña and others 2001).

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### 14. Percentage of people living within X kms of a health facility

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<b>Definition, rationale, and interpretation</b>	[Number of people living within X km radius of health facilities]/[Population estimate]  A larger percentage for this indicator suggests increased <i>geographical access</i> of health services for the population. The distance to the facility was not defined for this indicator so that you can make use of whatever data are available.
<b>Suggested data source</b>	Household surveys (e.g., Measure DHS 2006) or baseline studies in areas where health projects are planned, especially reproductive and obstetric care projects that are concerned with pregnant women arriving at facilities on time
<b>Stakeholders to interview</b>	MOH division that inspects and licenses facilities or that is in charge of infrastructure planning
<b>Issues to explore</b>	For the proportion of the population that is not within X kilometers of a facility, how far are they?  Inquire at the regional, facility, or program level whether outreach services are available for remote communities. If so, try to determine the frequency of outreach visits and which services are included.
<b>Notes and caveats</b>	Note the date of source information and whether known events have occurred since the survey. Other options include searching for household surveys that assess access to services. For instance, the Demographic and Health Surveys (Measure DHS 2006) measures the percentage of women with specific problems in accessing health care for themselves, and <i>distance to health facility</i> is an option (< <a href="http://www.measuredhs.com/">http://www.measuredhs.com/</a> >).

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**15. Financial access (select an indicator based on available data)**

The affordability of health services affects service delivery access from the point of view of the client and overall system equity. The following indicators were selected to provide insight into the question of the degree to which financial access may be a barrier in the service delivery system. If both the Health Financing and Health Service Delivery modules are being assessed simultaneously, only one person needs to collect the data but that should be reflected in the conclusions from both modules.

- a. OOP expenditure as percentage of total health spending. Note that this indicator is not automatically available from the database on the CD accompanying this manual but can be easily computed by multiplying [OOP as percentage of private health spending] by [private health spending as percentage of total health spending]
- b. OOP spending as a percentage of private health spending (Core Module indicator 16)

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**15. Financial access (select an indicator based on available data)**

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**Definition, rationale, and interpretation**

The numerator includes direct outlays of households, including gratuities and in-kind payments 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 the enhancement of the health status of individuals or population groups. These outlays include household payments to public services, nonprofit institutions, or NGOs; and nonreimbursable cost sharing, deductibles, co-payments, and fees for service.

- a. This indicator is a common measure of the share of household spending on health in the country. It represents the expenditures that the population makes out of pocket at the time of using health care services and purchasing medicines.
- b. This indicator shows household spending as a proportion of all private contributions to health spending (e.g., employer-financed health care whether voluntary or mandated by law), in addition to individual's out-of-pocket spending. It represents the relative role of households vs. other private sources for spending on health.

Only one of these indicators may be available for a country.

- a. High out-of-pocket spending as a share of total health spending (e.g., above 60 percent) can indicate that the population faces a financial barrier to accessing health care. It also suggests that the role of government spending to finance health care is relatively limited and that user fees and fees for related medicines and tests exist in the public and private sector. In lower income countries, out-of-pocket spending usually represents a very high percentage, or all, of total private spending on health. High out-of-pocket spending is also likely to represent a more significant barrier for low-income groups, thus affecting (vertical) equity.

**15. Financial access (select an indicator based on available data)**

- b. If total private spending is largely represented (e.g., above 80 percent) by out-of-pocket spending, it means relatively little other private spending exists and the individuals and households bear the full burden of private spending that fills the gap in government spending.

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**Notes and caveats** See note regarding regional comparisons under indicator 1.

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**Screening Question:** Are user fees for services provided by the MOH? If no, skip to indicator 17.

**16. User fee exemptions and waivers**

*Note:* Although fee exemption and waiver policies may exist for inpatient hospital care, this issue is primarily raised with respect to primary health care (PHC) services, especially priority services. For purposes of the rapid assessment, concentrate on PHC.

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**16. User fee exemptions and waivers**

**Definition, rationale, and interpretation**

User fee protection for vulnerable groups is usually in the form of (1) fee exemptions for all people in a specified sociodemographic category (e.g., children under age 5, students, elderly, military personnel, health care workers) or for specified services (e.g., immunizations, TB-DOTS, other chronic care) regardless of their income; (2) fee waivers for those deemed unable to pay because of low income, regardless of the services they need; or (3) both.

If no appropriate user fee protection mechanisms are in place for vulnerable groups, user fees may create a financial barrier to health care access for the most vulnerable.

Fee waivers and exemptions can promote equity of financial access for the poor and can promote use of services by priority population groups or people with conditions requiring follow-up or continual care. Waivers and exemptions must be administered well and accurately; however, and they must not erode the purpose of user fees in the first place (helping to pay for the quality and availability of health services in the public sector, especially when MOH budgets are constrained). For example, many countries establish official user fees and then provide exemptions and waivers that cover 80–90 percent of PHC visits.

*Module link:* Health Financing, indicator 15 (User fee policies)

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**Stakeholders to interview**

MOH officials at central and local levels, facility managers

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**16. User fee exemptions and waivers**

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**Issues to explore in stakeholder interviews**

Investigate whether formal criteria exist and have been promulgated for identifying patients who are eligible for fee exemptions or waiver—especially whether clear eligibility criteria exist for waivers for the poor (such criteria are often controversial and difficult to establish).

Explore who actually benefits from exemptions and waivers, and for what services.

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**17. Number of primary care or outpatient visits per person to health facilities per year**

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**Definition, rationale, and interpretation**

[Number of primary care or outpatient visits in a year]/[Total population]

This indicator is a measure of primary care or outpatient utilization of health services. The Pan American Health Organization (PAHO) defines outpatient health care as any professional encounter or contact, as an act of health service, between a nonhospitalized individual and a health worker responsible for the evaluation, diagnosis, treatment, or referral of that person in that encounter (PAHO 2004).

Make clear what health services are included in the indicator data you report—do the data include traditional medicine and the private or NGO sectors? If data are available, please provide for these sectors as well. Do the data include pharmacists? Does the numerator include health posts and health centers as well as hospital outpatient visits? If utilization has been measured for different groups, report on all available information, though primary care utilization would be the most useful indicator in many developing countries.

In most developing countries, a higher utilization rate of public sector health services (compared to the private sector) may be desirable, because it suggests access and a degree of trust in the public system, but to interpret this indicator, you will need to obtain a regional average.

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**Suggested data source**

WHO reports; situational analyses in reports from organizations giving technical assistance in health; MOH statistical division where health facility data are aggregated should have this information; World Bank (2006b), *World Development Indicators* <[www.worldbank.org](http://www.worldbank.org)> or most recent

Private sector utilization data may be available from a household survey on health service utilization. In the absence of a specific household health survey, the Measure DHS surveys present the percentage of women of reproductive age who get their contraception from the private sector. Unfortunately, MOH utilization data typically only cover public sector providers.

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**Stakeholders to interview**

Technical person in charge of aggregating MOH routine health information at the national level

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**17. Number of primary care or outpatient visits per person to health facilities per year**

<b>Issues to explore</b>	Obtain the data for previous years—what has been the trend (direction and duration)? If data are available for public and private health facilities separately, what can you infer about demand?
<b>Notes and caveats</b>	If utilization of inpatient care is more relevant to USAID needs, the relevant indicator would be the number of hospital discharges per 1,000 inhabitants.

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**18. Private sector service delivery**

Select one among the following indicators according to what data are available—

- a. Proportion of hospitalizations (or number of hospital days) that take place in the private vs. the public sector
- b. Utilization of private providers for health services in rural vs. urban areas per type of provider
- c. Percentage of women seeking prenatal services from public vs. private providers

**18. Private sector service delivery**

<b>Definition, rationale, and interpretation</b>	<p>Proportion of hospitalizations (or number of hospital days) that takes place in the <i>private sector</i>: [Number of inpatient stays or hospital days in private facilities]/[Total number of inpatient stays or total number of hospital days across all facilities]</p> <p>Proportion of hospitalizations (or number of hospital days) that takes place in the <i>public sector</i>: [Number of inpatient stays or hospital days in public facilities]/[Total number of inpatient stays or total number of hospital days]</p> <p>Utilization of health services per type of private provider in rural vs. urban areas. For each type of private provider identified (e.g., hospitals, clinics, traditional healers), use the following formulas—</p> <ul style="list-style-type: none"><li>• Utilization in urban areas = [Outpatient and inpatient visits in “type of private facilities” that are located in urban areas]/[Total number of outpatient and inpatient visits that take place in “type of private facilities”]</li><li>• Utilization in rural areas = 1 – Utilization in urban areas</li></ul> <p>Percentage of women seeking prenatal services from public vs. private providers = [Total number of women whose first prenatal care visit took place in a private facility]/[Total number of women who consulted for prenatal care services] × 100</p>
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**18. Private sector service delivery**

These indicators provide an estimation of the use of private sector care.

*Interpretation:* High private sector use can indicate an unmet demand for health services in the public sector, perhaps due to poor quality issues or access constraints. In systems with high private sector use, systems to regulate quality of care (e.g., licensing and accreditation of facilities) are particularly important.

Addressing the distribution of private providers across rural and urban areas is important to see if it reflects population distribution or if it is skewed, by comparing it with the distribution of the population in urban vs. rural areas (available in the Core Module, indicator 3). Distribution of private providers is virtually always skewed toward urban areas.

**Suggested data source**

MOH, Measure DHS, Living Standards Measurement Survey (LSMS), Household health expenditure survey, or NHA.

Percentage of women seeking prenatal services from public vs. private providers: Measure DHS

**Stakeholders to interview**

Professional provider associations or associations of private facilities may have capacity and utilization data. MOH may have utilization data for private providers. Other donors or health project directors, NGOs, or faith-based organizations will have qualitative data.

**Issues to explore**

Explore as possible the penetration of private providers into periurban and rural areas, paying special attention to the type of provider. The ones who work in the more remote areas are typically providers with little or no formal training—traditional healers including traditional birth attendants, medicine sellers, and maybe midwives and clinical officers.

**19. Existence of corporate social responsibility (CSR) programs that offer health services among the country's largest employers**

**Definition, rationale, and interpretation**

CSR programs exceed legally mandated services and include services provided through a company facility or by contracting out. They do not include employers that provide health insurance for their employees. Large employers, which may be multinational firms, national firms, or parastatals, can increase access to health services by providing those services directly to employees, employee families, and surrounding communities. Furthermore, some large employers such as mining and timber concerns are often located in remote areas with little access to health services.

Existence of CSR programs establishes a precedent in a country, which might be leveraged to encourage other large employers to provide similar services, or a firm that offers health services to employees could be persuaded to offer services to other community members. The absence of CSR programs might indicate an opportunity to encourage service provision by large employers.

**19. Existence of corporate social responsibility (CSR) programs that offer health services among the country's largest employers**

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Direct health service provision by large employers should be pursued as a health systems intervention in areas that have numerous large employers with substantial numbers of employees and where health services are not available or are adequate.

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**Stakeholders to interview**

Interview chambers of commerce, business associations, and donors. Explore local reports and international websites on CSR activities (e.g., <<http://www.ifc.org>> and <<http://www.csreurope.org>>)

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**Issues to explore**

Try to determine the scope of health service provision to estimate the number of people with access to health services through the largest companies. If businesses are interested and active in CSR, determine if other opportunities—such as health promotion or health product distribution—can capitalize on the interest in the business community.

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**Notes and caveats**

In many countries, CSR will not offer a mechanism for significantly increasing access to health services or otherwise improving health systems. If opportunities for CSR appear limited, you should not invest your time on this indicator.

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**F. Organization of Service Delivery**

*Organization of service delivery* has been defined by WHO (2001b) as “choosing the appropriate level for delivering interventions and the degree of integration.” This assessment will focus on integration and continuity of care—two areas that can feasibly be covered within the scope of this assessment and that are not covered by other modules. The higher the degree of integration and the greater the continuity of care, the more efficient the organization of care is in attending to patient needs (the efficiency gains have an upper limit, and many would argue that there may be a trade-off with effectiveness—and trade-off is partly how vertical programs are justified).

**Tip!**

**For summarizing issues related to access to care—**

- In the document review process, identify community, household, or patient studies that—
  - *Identify barriers to care.*  
Have any community surveys sought to determine whether utilization fees were a barrier to care? For instance, reproductive health studies may ask women where they last gave birth (e.g., facility vs. home delivery) or whether they sought prenatal care during pregnancy. For women who did not use health facilities, a common follow-up question is to identify the reason or barrier to access, such as cost, geographical, or cultural barriers. The Measure DHS (2006) survey includes the indicator *percentages of women with specific problems in accessing health care for themselves*, which probes on the nature of the barriers to care. Cultural access may be more of an issue if the country has many ethnic groups or languages. Existing studies may also probe whether people are not seeking services because staff or medicines are not available or because they choose to go to the private sector. Any such observations would be important to note.
  - *Compare access, coverage, or utilization of rural vs. urban areas or private vs. public providers.*
- Are any strategies available to improve (geographical, financial, cultural) access? What are they and how widespread are such efforts? How effective have these strategies been?

The questions in the following indicators can be asked at the primary care level, at the regional

**Tip!**

**For vertical service delivery systems:**

If the health delivery system is significantly “verticalized” (i.e., facilities and providers focused on a single disease or population such as reproductive health clinics or HIV/AIDS programs), you may need to focus on one or two priority vertical programs identified with the Mission. Because vertical programs receive external assistance, generalization across the system is not possible. One approach would be to compare the organization and performance of a vertical program with the country’s primary care system. Compare budgetary and technical support and output expectations (range of services expected to be delivered, population groups expected to be served).

health authority, and at national MOH programs. The answers may differ regionally, so as much as possible, attempt to find at the central level what the pattern might be for the country as a whole. Assessment of the organization of service delivery will rely more on key informant interviews and produce more descriptive information than the previous sections.

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**20. Daily availability of full range of key primary health care services**

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**Definition, rationale, and interpretation**      Fraction of the following services (immunization, TB, prenatal care, family planning, malaria, malnutrition) that are available at primary care facilities five days a week

This measure is a proxy for integration of services. Ideally, a client should be able to access all primary care services from any primary care provider at all times. Often, where services are not fully integrated, clients have access to certain services only on certain days of the week.

This indicator is measured as positive if *all* health facilities are supposed to offer immunizations all the days the facility is in operation, which would suggest greater continuity of care.

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**Suggested data source**      Interviews with stakeholders

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**Stakeholders to interview**      MOH vaccine program official  
WHO, UNICEF

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**Issues to explore**      If the indicator measures “None,” then note exactly how available immunization services are, noting the degree to which there may be regional differences. Find out how often other priority services are offered, such as prenatal care or HIV testing in high-burden countries.

At the facility level, are specific days of the week assigned to certain services, such as new prenatal care visits or tuberculosis? The more this scheduling is the case, the less integrated the system, though you might find regional variations.

Has the country adopted integrated management of care strategies, such as Integrated Management of Childhood Illnesses (IMCI), Integrated Management of Pregnancy and Childbirth (IMPAC), Integrated Management of Adult and Adolescent Illness (IMAI)? This information should be easily obtainable—IMPAC and IMAI have been in place since 2000. If the country has or is in the process of implementing these programs, it reflects MOH efforts to integrate services.

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**21. Number of vertical programs**

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**Definition, rationale, and interpretation**

Number of MOH vertical programs

“Vertical” programs are programs that focus on specific interventions, normally focusing on a specific disease or condition, such as HIV/AIDS, family planning and population, malaria, TB, malnutrition, polio. Many of these programs, which are often supported by multilateral donor organizations, are often found to be unsustainable once donors withdraw. Currently, the emphasis is on strengthening health systems to help countries achieve sustainable improvements in health status.

**Suggested data source**

Organizational chart of MOH, both overall chart and organizational charts of subdivisions likely to house vertical and nonvertical programs

**Stakeholders to interview**

MOH official with overview of MOH as a whole (for example, planning and statistics departments)

**Issues to explore**

What vertical disease programs does the country have? To what extent do they collaborate with other programs (e.g., child health, reproductive health), particularly in overlapping areas (e.g., HIV/AIDS and reproductive or maternal health or HIV/AIDS and TB)? For instance, overlapping might mean, in the case of TB and HIV that health workers working primarily with HIV/AIDS are trained in TB case management, and that HIV patients are consistently screened for TB and vice-versa.

One informal indicator of the degree of integration is the number of different clinical supervisors that visit a primary care facility (for different programs such as HIV, malaria, maternal health). The more supervisors, the less integrated the system. This issue has implications for the supervision portion of this assessment as well.

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**22. Level of informational continuity of care**

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**Definition, rationale, and interpretation**

Identified with the longitudinal or chronological dimension of continuity

Informational continuity of care refers to the ability of the health system to identify, store, and retrieve medical information on any particular patient over time, so that current care is appropriate in the context of previous known conditions and treatment (without the need to recollect such information based on the patient’s memory).

Some key questions to ask in increasing level of complexity are the following—

- a. Does the country have a nationally (or state or provincial level standardization if the level of decentralization is high) standardized system for recording multiple prenatal visits for the same pregnancy in the same patient?
- b. Does the country have a nationally standardized system for recording multiple prenatal visits for the same pregnancy in the same medical record stored at the health facility?

**22. Level of informational continuity of care**

- c. At the first-referral hospital level, are medical records centralized so that a provider has access to previous hospital encounters with a particular patient, including those in different hospital departments?

*Suggested ways of scoring this might be the number of points out of 3, or a grading of level a through c.*

**Suggested data source**

Hospital and health center in-charges, as well as district supervisors or program managers at the MOH level to determine extent to which facilities differ in this regard across the country

**Stakeholders to interview**

**Issues to explore**

Find out how the system has worked—a mere yes or no answer is insufficient to confirm that a system is functional. How broadly (i.e., geographically) are such systems in place?

**23. Level of vertical continuity of care**

**Definition, rationale, and interpretation**

Continuity of care across different levels of care

Three characteristics are emphasized: communication, transportation, and referral systems. For this high-level assessment, try to obtain qualitative information (if not, seek quantitative information as specified below) on the extent to which continuity of care between levels of care is reasonably supported.

- *Communication*: percentage of primary care facilities that have reliable access to telephone or radio communication to the referral hospital level
- *Transportation*: percentage of health centers with transportation to first referral level care
- *Referral systems*: existence of referral system data at the district level.

What data does the health system track to monitor referrals between facilities of different referral levels (e.g., community, health posts, health centers, and secondary and tertiary referral level hospitals)? How does the system know whether referrals are made and followed up? If such data exist, even if just at the district or facility level, *ask to see the data*.

The objective of this indicator is to inform on whether vertical continuity of care should be emphasized as an area for improvement in the recommendations to the MOH.

**Suggested data source**

Country studies on access and referral systems

**Stakeholders to interview**

MOH health services department

**Issues to explore**

Are referrals made to or from private sector (including pharmacies)? What evidence did you find of this practice?

## G. Quality Assurance of Care

To assure the clinical quality of health services, health systems must define, communicate, and monitor the level of quality of care. This information is used by policy makers and providers to improve the level of quality of care. Defining quality of care is often achieved by establishing national evidence-based standards, which represent an ideal of how clinical care should be implemented. Unfortunately, in many developing countries, the gap between such standards and what is possible to implement at the facility level is wide due to limited resources (e.g., lack of supplies and equipment). Even when resources are available, many providers may not have the time or motivation to implement new standards of care.

To help providers perform according to standards, policy documents need to be adapted into a practical form that providers can use, such as clinical guides or manuals, job aids, charts, forms, checklists, or posters. In addition, adherence to standards must be monitored to close the quality gap. Supervisors are instrumental in assuring quality of care by giving feedback on performance according to clinical standards. They usually assess the quality of care during site visits or from facility level service delivery data and documentation. Consult with the Health Financing module assessor (if health financing is being assessed), to see if he or she has found any example of provider payment mechanisms that reward quality.

### Tip!

#### On assessing quality—

The data needed to answer the section on quality would ideally be nationwide data which, in most cases, are not available.

#### At site visits—

1. Identify organizations that have focused on quality of care in the country by contacting the mission and other major donors
2. Read and analyze key reports that focus on service delivery and quality assurance including background sections or situation analyses
3. Interview stakeholders involved in quality assurance (donors and their health project teams, WHO and other United Nations entities, professional organizations, medical or nursing schools, MOH staff responsible for quality assurance or licensing).

**24. Existence of national policies for promoting quality of care**

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<b>Definition, rationale, and interpretation</b>	<p>Response: yes or no</p> <p>Determine whether the country has national level policy (e.g., written guidelines for course of action or other government documents) defining the government's role in promoting quality. Such guidelines indicate, at a basic level, the degree to which quality of care is formally recognized as a government priority.</p>
<b>Stakeholders to interview</b>	<p>Start with the USAID Mission and consultant, then, if necessary, try the MOH divisions that might be responsible for implementing such policies (e.g., divisions in charge of health promotion, quality or health services).</p> <p><i>Module link:</i> Human Resources, indicators 18–20 (training of human resources)</p>
<b>Issues to explore</b>	<p>What national structures (i.e., divisions or departments of MOH) are defined to implement such policy?</p> <p>How does that structure act—does it have a budget and an action plan (to define who will do what when)?</p> <p>Who funds the quality assurance work?</p> <p>What is the policy regarding the government role in assuring quality in the private sector?</p>

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**25. Existence of adaptation of clinical standards into a practical form that can be used at local level**

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<b>Definition, rationale, and interpretation</b>	<p>Response: yes or no</p> <p>Select two priority national clinical areas (e.g., high morbidity or mortality) stated in policy documents or elicited by interview with high-level health officials. For these two areas, investigate the existence of clinical guides or manuals developed for use on-the-job for the provider or supervisor (e.g., pocket guides, memory or job aids, algorithms, flowcharts, forms, posters, checklists, etc) <i>that are based on clinical standards.</i></p> <p>These tools facilitate adoption of clinical standards by providers and thus lower the barriers to change. In clinical areas in which updated national standards exist but poor quality of care persists, such tools are a first step toward improving quality of care.</p>
<b>Stakeholders to interview</b>	<p>Interviews at MOH programs, <i>in addition to</i> providers at facility site visits, to verify they have materials produced at the MOH level</p>
<b>Issues to explore</b>	<p>Site visits might also be an opportunity to ask providers whether they have published guidelines and how useful or practical they find job aids.</p>

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**26. Existence of clinical supervision by district level supervisor**

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**Definition, rationale, and interpretation**

Response: yes or no

To assure quality of care, the system must have the capacity to measure the current level of care against a defined level and to implement improvement when a quality gap is found. Supervision is often the most basic method health delivery system has to monitor quality of care; the response to supervisor feedback would be a change leading to improvement. For most developing countries, the capacity of the district, provincial, or regional health authority in conducting supervision is key to sustaining quality care.

Finding nationwide data on this indicator may be difficult, but the basic point is that, regardless of quality of supervision, it is a basic level of quality control. How does the central level monitor whether this oversight is being conducted? If the MOH has no method of monitoring this parameter, this finding is telling.

*Module link:* Human Resources, indicators 14 (supervision) and 15 (percentage of supervisory visits to health centers)

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**Suggested data source**

Interviews with MOH programs as well as district, provincial, or regional levels during provincial or local visits

**Stakeholders to interview**

**Issues to explore**

- Who is responsible for clinical supervision of primary care facilities— Central MOH? If so, from what departments? Provincial authority?
  - Does each facility have a recognized *clinical* supervisor?  
The quality and style of supervision can greatly influence the effectiveness of a supervision visit. Supervision visits that seem like an audit check or merely an opportunity for collecting service delivery data do not encourage the type of dialogue and feedback that help providers improve the quality of care.
  - How many trainings did supervisors receive on how to supervise in the last year?
  - To what degree is supervision integrated? Do supervisory teams conduct supervisions using a single supervision tool?
  - What is the frequency of supervision visits? To be conducted each month or quarter?
  - Does a document formally define the content of supervision or method of supervision? If so, describe. Get a copy to be able to describe how supervision works.
  - How do supervisors stay up-to-date with new standards of care?
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**27. Percentage of supervision visits to health centers planned that were actually conducted**

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**Definition, rationale, and interpretation** [Number of supervision visits to health centers conducted in the last year for which data are available]/[Number of planned supervision visits to health centers for the same year]

A measure of frequency of supervision visits—how many planned visits (as defined by the system) actually occur

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**Suggested data source** Find out at the MOH or district level how many visits need to be conducted in a year, and then ask how the completion of supervision visits is monitored.

**Stakeholders to interview** Ask to see this information for the previous year to count how many supervision visits were actually made. Conduct interviews at the district, provincial, or regional level or MOH program level to find out where facility supervisors reside. This means that depending on data availability, the indicator may be limited to just one program or one district, province, or region.

*Module link:* Human Resources, indicator 15 (percentage of supervisory visits conducted)

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**Issues to explore** If the percentage is low, probe for barriers to conducting supervision. Does the country have a national standard for the frequency of supervision visits at primary care facilities? If so, how does the system assess whether the expected number of supervision visits is conducted?

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**Notes and caveats** In some cases, supervision visits may be conducted by national MOH staff from various programs. In such cases, identifying which national MOH programs to interview by first interviewing supervisors at the regional level department might be more efficient.

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**28. Existence of other processes assuring quality of care besides supervision**

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**Definition, rationale, and interpretation**

Response: yes or no

Supervision is only one method of improving the quality of care. The previous two indicators have focused on the district level. Examples of other such quality assurance processes are formal or informal accreditation, continuous quality improvement teams, periodic health audits followed by improvement efforts, periodic client satisfaction surveys or suggestion boxes, or other processes in which quality of care is formally assessed and improved.

This indicator is qualitative and designed to identify previous quality assurance efforts.

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**Suggested data source**

Documents from or interviews with stakeholders that support quality of care or quality management, donors or their health project teams, WHO and other United Nations entities, professional organizations, medical or nursing schools, MOH staff responsible for quality assurance or licensing

**Stakeholders to interview**

Interviews at the facility level

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**Issues to explore**

If such processes exist, at what levels is quality assurance occurring (i.e., central, provincial, district, local)? Where (how broadly) are these processes implemented? What have been the results of such efforts from the point of view of different stakeholders?

In particular, probe for strategies that involve the community so that services offered meet community needs. Are assessments of client or community needs done regularly—for instance, a study that might assess where people choose to access health services first (e.g., traditional doctors or midwives, pharmacies, private providers, public providers)? If yes, what do the findings indicate?

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**H. Community Participation in Service Delivery**

Although utilization reflects the intersection of supply and demand, community participation refers to the demand side of the service delivery equation and demonstrates accountability and responsiveness to local needs. These indicators look at governance issues. For the purposes of this assessment of service delivery, clients and patients will be included as part of the community. (This section may overlap with the Governance module’s “Social Participation and System Responsiveness” section.)

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**29. Presence of official mechanisms to ensure the active engagement of civil society and the community in management of the health system**

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<b>Definition, rationale, and interpretation</b>	<p>Response: yes or no</p> <p>Examples might include local community health committees, community health promoters, community representation in health center management, inclusion of traditional health practitioners and traditional midwives in health management, participation of community associations (e.g., women’s groups, people living with HIV/AIDS) in decision making</p>
<b>Suggested data source</b>	<p>Interview intermediate health system level (e.g., provincial, regional, or district) or MOH division for health services and health promotion. Verify information during visits to health facilities.</p>
<b>Stakeholders to interview</b>	<p><i>Module link:</i> Governance, indicators 19 (participation of stakeholders in policy development) and 20 (participation at local levels)</p>
<b>Issues to explore</b>	<p>Describe existing mechanisms, how they function, and any available information regarding actual local implementation. In some cases, an official mechanism may not exist, but regional external donor-supported initiatives may be in place.</p>

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**30. Presence of official mechanisms to ensure the active engagement of civil society and the community in service delivery**

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<b>Definition, rationale, and interpretation</b>	<p>Response: yes or no</p> <p>Examples would include any community roles in the provision of health services, such as community health promoters, community providers of antiretroviral for HIV/AIDS patients or DOTS for TB patients, traditional health practitioners or traditional midwives in service delivery, health campaigns.</p>
<b>Suggested data source</b>	<p>Interview intermediate health system level (e.g., provincial, regional, or district) or MOH division for health services or health promotion. Verify information during visits to health facilities.</p>
<b>Stakeholders to interview</b>	<p><i>Module link:</i> Governance, indicators 18 (engaging advocacy groups to develop policy) and 22 (responsiveness to stakeholders)</p>
<b>Issues to explore</b>	<p>Describe existing mechanisms, how they function, and any available information regarding actual local implementation</p> <p>In some cases, an official mechanism may not exist, but regional external donor-supported initiatives may be in place</p>

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**31. Existence of official mechanism for eliciting population priorities, perceptions of quality, and barriers to seeking care**

<b>Definition, rationale, and interpretation</b>	<p>Response: yes or no</p> <p>Examples might include periodic client satisfaction surveys at facilities or meetings in the community or with community associations (e.g., women’s groups, people living with HIV/AIDS) in which health staff participate and elicit, for example, community health needs, perception of service delivery quality, barriers.</p>
<b>Suggested data source</b>	<p>Interview intermediate health system level (e.g., provincial, regional, or district) or MOH division for health services or health promotion. Verify information during visits to health facilities.</p>
<b>Stakeholders to interview</b>	<p><i>Module link:</i> Governance, indicators 18 (engaging advocacy groups to develop policy) and 22 (responsiveness to stakeholders)</p>
<b>Issues to explore</b>	<p>If the country has no official mechanism, regional external funder-supported efforts may institute such initiatives and they might be useful to describe.</p>

**8.3.3 Summary of Issues and Indicators to Address in Stakeholder Interviews**

Overall, discussions with stakeholders should elicit their perspectives on specific strengths, weaknesses, opportunities, and threats in the service delivery system. These discussions provide the chance to get information beyond the story told by the indicators. Because this assessment is taking place under the aegis of USAID, however, note that stakeholders may have a tendency to emphasize those areas of their specific programs that need additional funding, rather than take the perspective of the health system as a whole.

**Table 8.3 Summary of Issues to Address in Stakeholder Interviews**

Profile of Stakeholder to Interview	Issues to Discuss with Stakeholder
USAID Mission or consultant; documents, partners, and programs that they identify or that you identify via stakeholder analysis	<p>Determine USAID’s role. Because the USAID Mission is the main client for the assessment, eliciting as much detail as possible on what its needs and interests are will be crucial. When necessary, helping the Mission to clarify its objectives for the assessment will help make best use of the assessment period. In addition, find out what key documents and key stakeholders the Mission considers to be useful in understanding how the current system works. This information will help to identify both the Mission’s perspective and possibly what may be missing from its perspective.</p>
MOH officials or departments responsible for licensing, maintaining, equipping, and infrastructure planning	<ul style="list-style-type: none"> <li>• Explore issues regarding coverage, availability, access, and utilization of services</li> <li>• Determine extent and functioning of facilities and health staff</li> </ul>

<b>Profile of Stakeholder to Interview</b>	<b>Issues to Discuss with Stakeholder</b>
MOH statistical or planning division compiling service delivery data	<ul style="list-style-type: none"> <li>• Explore utilization data</li> <li>• Determine data reliability</li> <li>• Understand the process of data collection, including coverage of private sector</li> </ul>
MOH maternal health or reproductive health division, United Nations agencies, donors, NGOs involved in maternal and reproductive health	<ul style="list-style-type: none"> <li>• Explore issues regarding MOH programs' ability to gauge health needs, service delivery activity, and quality of services; to coordinate major health players; and to address gaps at the systems' level</li> <li>• Determine integration of health programs</li> </ul>
MOH child health or vaccine-preventable diseases division, WHO, UNICEF, NGOs involved in child health	Explore issues regarding MOH programs' ability to gauge health needs, service delivery activity, and quality of services; to coordinate major health players; and to address gaps at the systems' level, including issues regarding coordination and management of data
Regional health authority (including provincial, district) or MOH division(s) that conduct(s) supervision if regional level does not	<ul style="list-style-type: none"> <li>• Explore the formal supervisory system, compare it to reality, and understand the barriers. Issues regarding management and supervisory capacity include the following—               <ul style="list-style-type: none"> <li>○ Availability of equipment, materials, clinical standards, staff at facilities</li> <li>○ Existence of clinical supervision by district level supervisor</li> <li>○ Frequency of supervision visits</li> <li>○ Content or methodology of supervision visits, or both</li> <li>○ Percentage of planned supervision visits to health centers that were actually conducted</li> <li>○ Existence of other processes assuring quality of care besides supervision</li> </ul> </li> <li>• Ask: At the facility level, are specific days of the week assigned to certain services such as new prenatal care visits or TB? The more this is the case, the less integrated the system, though you might find regional variations.</li> <li>• Ask: What vertical disease programs (e.g., polio, TB, HIV/AIDS, malaria) are offered?</li> <li>• Ask: Has the country adopted any integrated management of care strategies, such as IMCI, IMPAC, IMAI?</li> </ul>
Primary care facility	<p>Ask: What are the main challenges to providing sufficient quality services at the primary care level? Inquire about the following—</p> <ul style="list-style-type: none"> <li>• Availability of equipment, materials, clinical standards, staff</li> <li>• Existence of clinical supervision by district level supervisor</li> <li>• Frequency of supervision visits</li> <li>• Existence of in-house facility supervisor</li> <li>• Content or methodology of supervision visits, or both</li> <li>• Existence of other processes assuring quality of care besides supervision</li> </ul>
<ul style="list-style-type: none"> <li>• Private providers of different cadre, including from associations (e.g., private clinics, hospitals, doctors, nurses)</li> <li>• Business associations</li> </ul>	<p>Explore issues regarding coordination with public sector and existing intersectoral communication structures. You will need to understand private sector perspective on government: does government facilitate or constrain private service provision?</p> <p>Obtain a description of private providers association (if any): number of members, are all private providers required to register with association, to</p>

Profile of Stakeholder to Interview	Issues to Discuss with Stakeholder
<ul style="list-style-type: none"> <li>• Private health delivery companies</li> </ul>	<p>what extent is membership believed to represent all private providers in country</p> <p>Understand the following issues regarding the private sector—</p> <ul style="list-style-type: none"> <li>• Relative importance of the private sector compared to public sector</li> <li>• Rate of utilization (as compared to the public sector, or between urban and rural settings)</li> <li>• Main constraints for private businesses to develop or maintain themselves, for example, in terms of—               <ul style="list-style-type: none"> <li>○ Infrastructure</li> <li>○ Access to financing</li> <li>○ Government policies and regulations</li> <li>○ Crime</li> <li>○ Corruption</li> <li>○ Innovation</li> <li>○ Labor laws</li> </ul> </li> <li>• Existence of policies developed, promoted, and used by the government to involve the participation of the private sector in health</li> </ul>
<p>Donors (involved in service delivery)</p>	<p>Explore how the donors operate in the country. Who are the major donors working on health system strengthening issues? What are the key systems issues that donors have attempted to address? What has been their success? What remaining gaps exist and lessons learned from their experience? What are different ways USAID can complement existing efforts while contributing in a manner that plays to the mission's strengths that maximize (if possible measurable) impact?</p> <p>Determine the following—</p> <ul style="list-style-type: none"> <li>• Number of public vs. private sector facilities</li> <li>• Main constraints for private health care providers to develop, or maintain themselves, for example, in terms of—               <ul style="list-style-type: none"> <li>○ Infrastructure</li> <li>○ Access to financing</li> <li>○ Government policies and regulations</li> <li>○ Crime</li> <li>○ Corruption</li> <li>○ Innovation</li> <li>○ Labor laws</li> </ul> </li> <li>• Policies developed, promoted, and used by the government to involve the participation of the private sector in health</li> </ul>

## 8.4 Summarizing Findings and Developing Recommendations

Chapter 4 describes the process that the team will use to synthesize and integrate findings and prioritize recommendations across modules. To prepare for this team effort, each team member must analyze the data collected for his or her module(s) to distill findings and propose potential interventions. Each module assessor should be able to present findings and conclusions for his or her module(s), first to other members of the team and eventually at a stakeholder workshop and in the assessment report (see Chapter 3, Annex 3J for a proposed outline for the report). This process is iterative; findings and conclusions from other modules will contribute to sharpening and prioritizing overall findings and recommendations. Below are some generic methods for summarizing findings and developing potential interventions for this module.

### 8.4.1 Summarizing Findings

Using a table that is organized by the topic areas of your module (see Table 8.4) may be the easiest way to summarize and group your findings. (This process is Phase 1 for summarizing findings as described in Chapter 4.) Note that additional rows can be added to the table if you need to include other topic areas based on your specific country context. Examples of summarized findings for system impacts on performance criteria are provided in Annex 4A of Chapter 4. In anticipation of working with other team members to put findings in the SWOT framework (strengths, weaknesses, opportunities, and threats), you can label each finding as either an S, W, O, or T (please refer to Chapter 4 for additional explanation on the SWOT framework). The “Comments” column can be used to highlight links to other modules and possible impact on health system performance in terms of equity, access, quality, efficiency and sustainability.

**Table 8.4 Summary of Findings—Health Service Delivery Module**

Indicator or Topical Area	Findings (Designate as S=strength, W=weakness, O=opportunity, T=threat.)	Source(s) (List specific documents, interviews, and other materials.)	Comments <sup>a</sup>

<sup>a</sup>List impact with respect to the five health systems performance criteria (equity, access, quality, efficiency, and sustainability) and list any links to other modules.

### 8.4.2 Developing Recommendations

After you have summarized findings for your module (as in Section 8.4.1 above), now it is time to synthesize findings across modules and develop recommendations for health systems interventions. Phase 2 of Chapter 4 suggests an approach for doing this with your team. Table 8.5 below provides a list of common interventions seen in the area of service delivery that you may find helpful to consider in developing your recommendations.

**Table 8.5 Strategies for Strengthening the Service Delivery Sector**

Strategies	Topical Areas
Develop strategies that increase access to services in remote areas such as organizing community transportation; rotating community clinics; coordinating and sharing clinical responsibilities with community midwives, traditional healers, and community health workers; planning and budgeting; advocating for construction, full staffing of health posts, health centers and hospitals; seeking collaborative partnerships with private sector (for-profit, NGO, church, pharmacies) to serve more people.	<ul style="list-style-type: none"> <li>• Availability, access, coverage, and utilization of service delivery</li> <li>• Community participation in service delivery</li> </ul>
Collaborate with communities (i.e., via local governments, associations, local NGOs, ad hoc community meetings) to participate in seeking solutions for improving health services to the community.	<ul style="list-style-type: none"> <li>• Community participation in service delivery</li> </ul>
Strengthen and integrate supervision capacity at the intermediate (district) level by introducing supportive supervision.	<ul style="list-style-type: none"> <li>• Organization of service delivery</li> <li>• Quality assurance of care</li> <li>• Service delivery outputs and outcomes</li> </ul>
Improve quality (i.e., adherence to clinical standards) in a selected clinical domain using facility level quality improvement teams working as a collaborative.	<ul style="list-style-type: none"> <li>• Quality assurance of care</li> <li>• Service delivery outputs and outcomes</li> </ul>
Institute a formal or informal accreditation system that gives recognition or other incentives for a minimum level of quality of services.	<ul style="list-style-type: none"> <li>• Quality assurance of care</li> <li>• Service delivery outputs and outcomes</li> </ul>
Institute a “pay for performance” incentive system that rewards facilities for improved quality of services.	<ul style="list-style-type: none"> <li>• Organization of service delivery</li> <li>• Service delivery outputs and outcomes</li> </ul>
Engage the private sector by informing or educating private providers about new approaches, such as IMCI or health improvement measures; training private providers in health service provision or business skills; training public sector staff to improve their skills to manage and negotiate with the private sector.	<ul style="list-style-type: none"> <li>• Organization of service delivery</li> <li>• Service delivery outputs and outcomes</li> </ul>
Engage private sector by providing incentives, such as subsidies, tax-breaks or non-financial incentives to the private sector for specific health services. Establish alliances with private providers or employers on behalf of specific health services (such as immunization).	<ul style="list-style-type: none"> <li>• Organization of service delivery</li> <li>• Service delivery outputs and outcomes</li> </ul>

As much as possible, make conclusions about service delivery findings within the first week of the assessment so that you can check your findings with interviewees. Organize this section by topical area unless another organizational structure is clearly preferable. One approach may be to start from the end, in other words, to identify service delivery outputs and outcomes that point to weakest areas in the service delivery system. Are the weaknesses due to key system inputs that tend to be in short supply? Is it possible to postulate root causes of these problems? In the context of the given country (i.e., its needs, USAID niche identified from stakeholder analysis, and constraints), what key areas of improvement would be feasible?

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