CHAPTER 4
SYNTHESIZING FINDINGS AND DEVELOPING RECOMMENDATIONS

4.1 Introduction

The strength of this approach in assessing the health system is that it offers the possibility to look at many different facets of the system at the same time. The various technical areas assessed by using this manual interact with each other and affect one another's ability to function well (as shown in Figure 2.1 in Chapter 2). Thus, the process of synthesizing across modules is key for identifying pivotal opportunities and challenges, and making effective and appropriate recommendations.

Most certainly the health system assessment will reveal a list of problems and needs that far exceeds U.S. Agency for International Development (USAID) resources available for health. Early in the assessment process, either before the country visit or as part of the initial meeting with the USAID mission, the team should explicitly discuss criteria for prioritizing assessment findings and recommendations with the mission and key stakeholders such as the Ministry of Health (MOH). The criteria will likely come from the mission's country and health sector strategies, and the government's poverty reduction and health sector strategies. Other possibilities for criteria include data on burden of disease; links with particular initiatives (e.g., President's Malaria Initiative and U.S. President's Emergency Plan for AIDS Relief); gaps or synergies with other donor programs;[1] or non–health criteria linked to governance or economic growth, historical, economic, sociocultural, and political factors.[2] Given that priorities for USAID and the government will usually not be framed in terms of systems improvements, throughout the assessment and development of recommendations the team will need to demonstrate how health systems interventions might address specific disease or population (e.g., malaria, children) objectives.

This chapter describes the process of developing conclusions and recommendations at the level of each module and the process of synthesizing these findings and prioritizing recommendations across modules. The process proposed includes four phases, each building on the previous stage—

1. Distilling initial findings and strengths and weaknesses related to each module area (by individual assessors)

2. Synthesizing conclusions across modules as a team (overall strengths and weaknesses of the health system, root causes, opportunities, threats), and developing initial recommendations for intervention and action

3. Validating conclusions and recommendations with stakeholders

[1] Use the donor mapping exercise in the core module (Chapter 5) to identify gaps and opportunities.
[2] If the assessment is being conducted with the MOH as the primary audience, most of these same criteria can be applied (government's poverty reduction and health sector strategies; burden of disease; links with particular global initiatives; or criteria linked to governance, economic growth, or political factors) but the priorities may vary.

4. Finalizing conclusions and recommendations for the final report

These four stages, presented in Box 4.1, reflect an iterative process of individual efforts and team discussion and reflection. The results from such a synthesis will only be as good as the clarity and quality of each module's assessment and the ability of the team to integrate its findings and recommendations.

Box 4.1
Proposed Strategy for Synthesizing Findings and Recommendations of Health System Assessment

Phase 1: Synthesizing findings and preliminary conclusions for each module
(during first week in-country)
Step 1.1: Analyze findings and initial recommendations for each module.
Step 1.2: Identify strengths and weaknesses by technical area.

Phase 2: Synthesizing findings and recommendations across modules assessed
(team session about halfway through time in-country)
Step 2.1: Share initial findings across modules.
Step 2.2: Summarize health system strengths and weaknesses.
Step 2.3: Review underlying causes of identified health system problem areas.
Step 2.4: Prepare an initial formulation of strategies and recommendations.
Step 2.5: Identify needs for verification or additional information.

Phase 3: Preparation and implementation of validation sessions
(near the end of time in-country)
Step 3.1: Prepare conclusions and recommendations for the stakeholder workshop.
Step 3.2: Conduct sessions with stakeholders (e.g., workshop, debriefings).

Phase 4: Finalizing findings and recommendations for the assessment report
(final session before leaving country and after)
Step 4.1: Refine findings and recommendations based on stakeholder feedback.
Step 4.2: Refine and finalize individual modules and conclusions.

4.2 Phase 1: Synthesizing Findings and Preliminary Conclusions for Each Module

Although this process is specified within each module, the following subsections propose some generic methods for synthesizing findings and developing potential interventions for each technical area. Over the course of the assessment, each module assessor should be able to present his or her findings and conclusions, first to other members of the team, and eventually at a stakeholder workshop and in the assessment report. This process is iterative, and in it, findings and conclusions from other modules will contribute to sharpening and prioritizing overall findings and recommendations.

4.2.1 Step 1.1. Analyze findings and initial recommendations for each module

It may be easiest to summarize findings in a tabular format, using the topic areas and specific indicators presented in each module as a grouping. Table 4.1 presents a suggested format. The "Comments" column can be used to highlight links to other modules and possible impact on health system performance criteria: equity, access, quality, efficiency, and sustainability. See Annex 4A for examples of summarized findings and impacts on performance criteria based on the assessments conducted in Benin and Angola. This table, and others in the following sections, can also be used to develop the report's chapter on the module's technical area (see Annex 3J in Chapter 3 for a proposed report outline).

Table 4.1 Summarizing Findings per Module

Indicator or Topic Area	Findings	Source(s)[a]	Comments[b]

[a] List specific documents and interviews.
[b] Include effects on equity, access, quality, efficiency, and sustainability as well as links to other modules.

4.2.2 Step 1.2 Identify strengths and weaknesses by technical area

The next step would be to analyze the findings and identify strengths and weaknesses related to each module or technical area that was assessed. Identifying strengths and weaknesses is the first step of doing a SWOT (strengths, weaknesses, opportunities, and threats) analysis, which will continue through group discussion and synthesis across modules. Box 4.2 presents a definition of a SWOT analysis.

Box 4.2
SWOT Analysis

SWOT stands for strengths, weaknesses, opportunities and threats.

Strengths are elements of the system that work well, thereby contributing to the achievement of system objectives. In identifying strengths, look for factors that contribute to good system performance. Examples include training programs in place for improving human resource capacity or cultural and public acceptance of health objectives. Recommendations should build on the strengths of the existing system.

Weaknesses are attributes of the system that constrain achievement of health systems objectives. In identifying weaknesses, look for factors that hinder improved system performance. Examples include lack of partnerships with the private sector or staff dissatisfaction with salaries or extensive staff turnover.

Opportunities are conditions external to the health system that can facilitate the achievement of health systems objectives. In identifying opportunities, look for factors that you can take advantage of when planning interventions. Examples include increased donor funding or the existence of a vibrant private sector to form partnerships with.

Threats are external conditions that can derail achievement of health system objectives. In identifying threats, look for factors outside the health system that have a negative effect on it. Examples include low budget allocation to health or upcoming elections that will change MOH leadership or a currency devaluation that will depress health worker income.

Although still early in the process, the individual module assessor should begin thinking about key problem areas, contributors to the problem (causes), and potential interventions, in preparation for Phase 2.

4.3 Phase 2: Synthesizing Findings and Recommendations across Modules Assessed

Phase 2 is primarily a team exercise to pull together the information obtained from the individual modules and synthesize the results in a way that can be communicated clearly to others and to pull out priority recommendations for action or intervention.

> **Tip!**
>
> Teams testing this approach found that the intense focus on completing individual modules can make it a challenge to move quickly to integrating and synthesizing across modules. What can be done?
> - Hold daily debriefings among team members
> - Proactively identify links and cross-cutting issues
> - Share draft chapters early
> - Hold several team sessions to discuss issues and problems
>
> Assessors should also ask key informants for their perspectives on strengths, weaknesses, opportunities, and threats.

This second phase should begin after all team members have collected enough data to arrive at some preliminary conclusions for their modules, about halfway through the team's in-country trip.[3] This timeline will allow sufficient time afterward to complete the assessment, fill any information gaps, validate conclusions and recommendations with stakeholders, and review feedback before leaving country. The steps below present a team meeting format of a half to a full day for conducting Phase 2 activities. The length of the meeting will depend on how many modules are being completed. Supplies needed for the meeting include large index cards, flipcharts, markers, and tape.

4.3.1 Step 2.1: Share initial findings across modules.

Each team member should prepare a 10–15-minute presentation to the team on findings for each of his or her modules. This presentation should include—

- The main findings regarding the current status of his or her technical area, including strengths and weaknesses, and its impact on health system functioning overall
- Thoughts on recommendations and the rationale for them
- Discussion at the performance criteria level: how do topics or indicators contribute or detract from achieving better performance for each of the performance criteria? (A useful approach would be to group issues around each performance criteria)

Each team member should have each of these conclusions and recommendations summarized on a large index card (one conclusion or recommendation per card). After they have been presented

[3] This timeline assumes that the assessment is conducted by an international team who makes one in-country trip of about two weeks. If the assessment is conducted by a local team, the same sequence holds but can be stretched over a longer period.

to the team, these index cards should be posted on the wall. At the end of the exercise, the number of index cards with the conclusions and recommendations listed will likely be large.

4.3.2 Step 2.2: Summarize health system strengths and weaknesses

Consolidate the index cards on the wall where possible by moving cards around and grouping them as strengths, weaknesses, opportunities, or threats (see Box 4.2) for the overall health system. Using the criteria established with the USAID Mission, decide which cards are most important, leaving only those and removing others. If available, consult the Mission's Strategic Objectives (SOs) for the health sector, including intermediate results, for guidance and priorities on USAID's strategy in the health sector. Take a critical look at the data and evidence to support each conclusion. Flag findings (i.e., index cards) that warrant additional evidence or validation.

4.3.3 Step 2.3: Review underlying causes of health system problem areas identified

Once the problem areas are grouped into the SWOT framework, the list of weaknesses and threats will most likely look daunting. The team needs to analyze how these problems are connected and how they affect health systems performance. A root cause analysis generates and sorts hypotheses about the underlying causes of problems and how they relate to one another and helps one broaden one's thinking and look beyond a single "cause." This analysis should help define higher level problems and facilitate formulation of integrated strategies and recommendations. Root causes are best defined as manageable problems that can be addressed through specific interventions. For example, insufficient supervision may be a root cause, whereas poverty is not.

There are many techniques for doing root cause analysis, including a "cause and effect" or "fishbone" diagram (as demonstrated in several of the modules).[4] At a minimum, you can do a root cause analysis by asking yourself for any specific problem, "Why it exists," and then for each reason given, ask "Why does that situation exist?" and so forth.

Tip!

If team members need more structure to their examination of root causes, they can start by examining the situation at the service delivery level.

- Are standards of care defined?
- Are medicines, equipment, and other materials available?
- Are staff available and motivated at the service delivery level to provide care?
- Is care accessible?

The next set of questions look for deeper causes of problems identified here.

- To what extent are human resources issues affecting quality and quantity of care?
- To what extent is financing affecting these areas?
- To what extent are stewardship (governance) issues and information availability affecting these areas?
- To what extent is the private sector overall contributing to service delivery?

Discuss and analyze potential implications of the final list of high-level problems. In particular, note any political sensitivities and think about how best to address these in the stakeholder workshop or other debriefings. The local consultant in the team should actively advise the team and guide in this regard.

[4] Many resources have detailed information about root cause analysis. One source is Massoud and others. (2001).

4.3.4 Step 2.4: Prepare an initial formulation of strategies and recommendations

The next step is to begin to formulate overall strategies and recommendations based on the SWOT and root cause analyses. Keep the primary audience's needs in mind: for example, USAID Mission investments or actions.[5] It will be important at this stage to reflect on USAID's competitive advantages compared to that of other donors and the gaps in current donor programming, as well as opportunities for consistent, coordinated donor focus.[6] The donor mapping exercise (part of the Core Module in Chapter 5) should also help in identifying gaps and opportunities. An attempt should be made to develop integrated strategies that address multiple problems and reinforce each other. In deriving the strategies, make sure to continually ask these four questions.

How can we—

- Use the strengths?
- Address or bypass the weaknesses?
- Exploit the opportunities?
- Defend against the threats? (WHO 2002)

Each potential intervention should be assessed for its expected results (what will change because of this intervention?), potential impact on health system performance (in terms of equity, access, quality, efficiency, and sustainability), its feasibility (could it actually be implemented?), the speed with which it can be implemented (is this something that can be implemented within a year, or would it take several years?), and some rough assessment of cost implications (low, medium, high). Table 4.2 provides a framework for analyzing potential interventions.

Table 4.2: Analyzing Potential Interventions per Module

Proposed Intervention	Expected Result	Impact on Health Systems Performance[a]	Feasibility	Implementation Speed	Cost

[a] Effects on equity, access, quality, efficiency and sustainability, as defined in Annex 1A.

Linking strategies and recommendations to health outcomes or results as well as to USAID

[5] If this assessment is being done with the MOH as the primary audience, prioritization of problem areas and recommendations will need to focus on a broader range because the MOH is responsible for addressing all health systems issues. Prioritization can be done based on criteria such as urgency, government priorities, and funding possibilities.

[6] For example, other donors may participate in a sector-wide approach while USAID leads with technical assistance, or other donors may be focusing on the public sector while USAID has focused on the private sector.

objectives and country's sector strategy is also important. Each strategy should be directly linked to a result and USAID objective.[7] As necessary, tie proposed recommendations to the Mission's SOs for the health sector, and how the recommended interventions might help achieve intermediate results, SOs, and desired health outcomes.

4.3.5 Step 2.5: Identify needs for verification or additional information

Review conclusions, strengths and weaknesses, opportunities and threats, root causes, and potential strategies and interventions—where is additional information, validation, or discussion needed? Make a list and assign team members to address these information gaps before the stakeholder workshop.

Note: In the interim between Phase 2 and Phase 3, the team should collect additional evidence and seek comments and consensus from stakeholders to refine preliminary findings and recommendations. Given that the assessment report is being prepared for the USAID mission, test ideas for conclusions and recommendations with key mission staff, if possible. The local consultant may also have a good perspective on political and operational feasibility of potential recommendations.

4.4 Phase 3: Preparation and Implementation of Validation Sessions

Phase 3 focuses on validating findings, conclusions, and recommendations with key stakeholders. In addition, the team will work with stakeholders to prioritize interventions for health system strengthening.

4.4.1 Step 3.1: Prepare conclusions and recommendations for stakeholder workshop or other debriefings

After having collected additional information and potentially having received some feedback, the team should meet again. Each team member should update the team on his or her conclusions and recommendations for each module. Then the team should review overall health system conclusions and recommendations in light of new information and feedback received since the first meeting. It will be important to summarize health system performance in terms of the five performance criteria: equity, efficiency, access, quality, and sustainability. Teams should determine the levels of analyses necessary for performance criteria, based on available data and quantifiable information. See Annex 4A for examples from Angola and Benin assessment reports on how to summarize findings with respect to these measures.

It is usually prudent to informally vet conclusions and recommendations with key stakeholders before any formal meetings or presentations. To avoid arousing political sensitivities, conclusions and recommendations should be presented to stakeholders as preliminary, with the understanding that stakeholder concurrence is a prerequisite to finalizing conclusions and recommendations. Team members should decide if they feel they can prioritize

[7] If the assessment is being done for the MOH as the primary audience, recommendations should be linked to objectives and strategies outline in MOH policy documents.

recommendations or if it would be more appropriate to present a range of recommendations and rationales and use the stakeholder workshop to prioritize. This decision will depend on whether the potential recommendations are broad, specific, politically sensitive, or politically neutral.

If the team is ready to present firm recommendations, it can use the simple schematic presented in Figure 4.1 to present findings, recommended strategies, and expected results. Figure 4.2 presents an example from the Angola assessment report (Connor and others 2005). The team can decide to develop one of these for each module or only for some high-priority issues, depending on what is most appropriate for the findings and conclusions for the country.

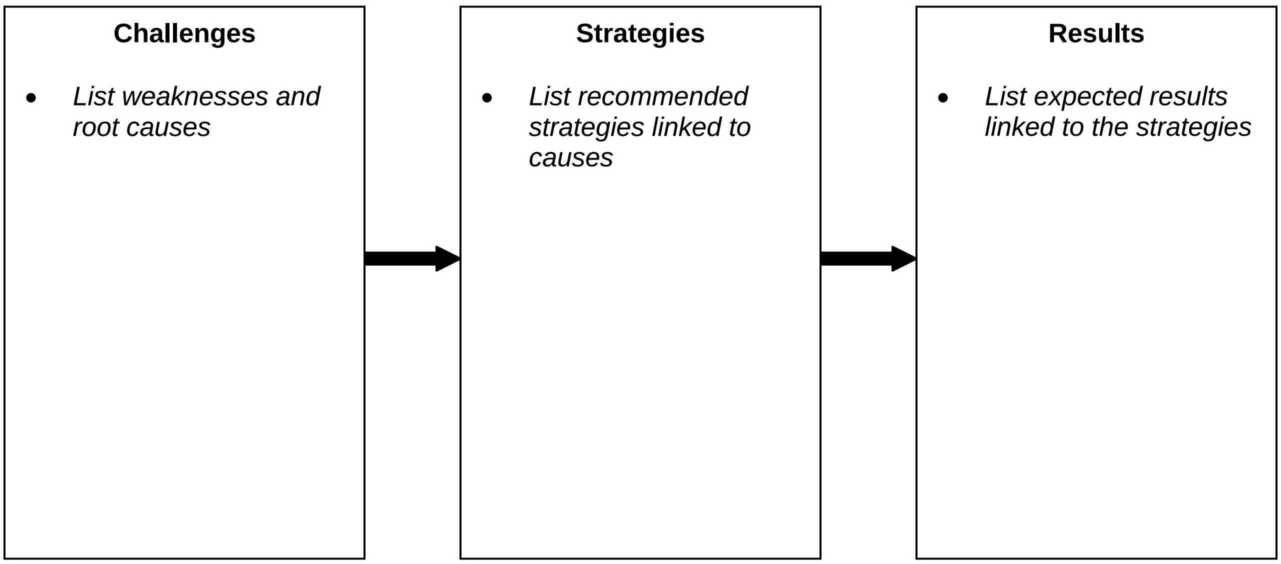
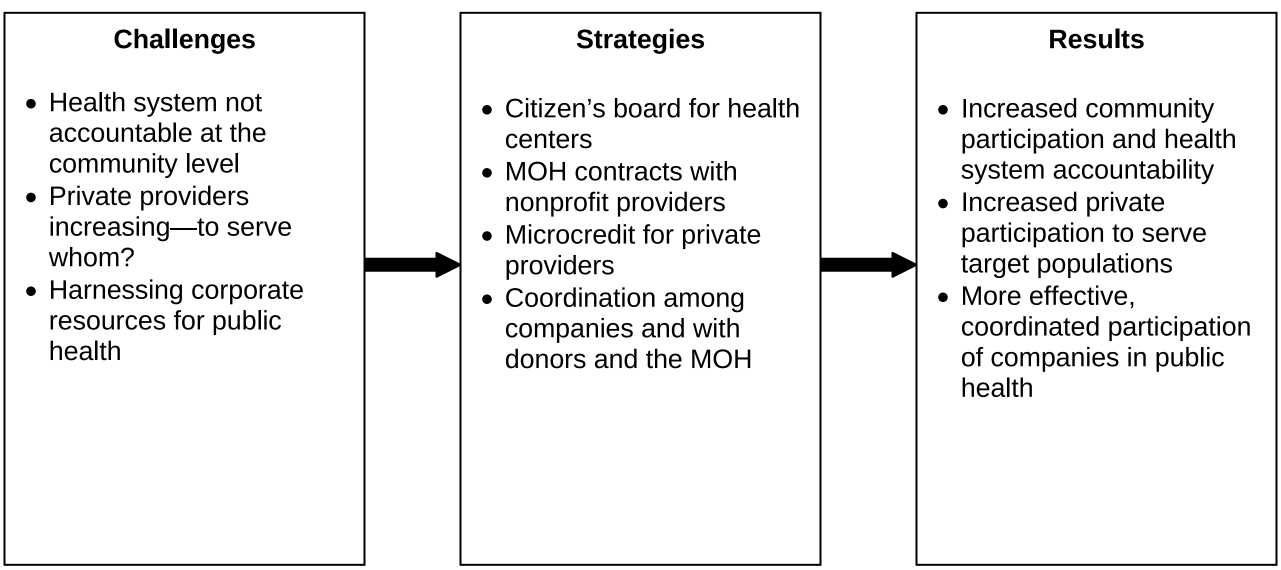


Figure 4.1 Sample Schematic for Presenting Findings and Recommendations



Source: Connor and others (2005)

Figure 4.2 Public-Private Partnerships in Angola: Findings and Recommendations

4.4.2 Step 3.2: Conduct sessions with stakeholders

The purpose of a session with stakeholders, be it an individual debriefing or a stakeholder workshop, is to validate the findings and discuss the feasibility and effectiveness of recommendations. Chapter 3 lays out the process for organizing a stakeholder workshop. Before this workshop, if time is available or the situation warrants, it may be useful to debrief and discuss the findings and preliminary recommendations with key individuals, either in the USAID Mission or in the MOH, or other key partners, such as professional medical associations.

Stakeholders should be engaged in selecting among and prioritizing interventions. Prioritization is ultimately a political decision. It is the assessment team's role to maintain their technical objectivity. The assessors need to report their findings about the health system, their recommendations for next steps, and the data and rationale to support their conclusions. The team can help facilitate consensus on priorities but should not be viewed as compromising its technical perspective.

4.5 Phase 4: Finalizing Findings and Recommendations for the Assessment Report

Using the feedback and discussions from the stakeholder session, the team must now complete its findings and recommendations for the final assessment report.

4.5.1 Step 4.1: Refine findings and recommendations based on feedback from stakeholder discussion

After the stakeholder workshop and any debriefings, the team should hold a final team session to incorporate discussions and feedback from stakeholders into final conclusions and recommendations for the assessment. Because the team is responsible for the content of the report, team members must use their judgment about what feedback to incorporate. This decision should be made based on comparing and weighing the feedback against (1) Mission priorities, (2) knowledge of historical information, and (3) other evidence.

4.5.2 Step 4.2: Refine and finalize individual modules and conclusions

Chapter 3 discusses report preparation and provides a sample outline (see Annex 3J). Depending on the findings, the priorities, and the primary audience, the final report may only include major recommendations, or it may also include recommendations at the level of each module as well.

References

Adeya, G., A. Bigirimana, K. Cavanaugh, and L. M.Franco. 2006. Rapid Assessment of the Health System in Benin. Arlington, VA: Management Sciences for Health, RPM Plus.

Connor, C., Y. Rajkotia, Y. Lin, and P. Figueiredo. 2005. *Angola Health System Assessment.* Bethesda, MD: Partners for Health Reform*plus* Project, Abt Associates Inc.

Massoud, R., K. Askov, J. Reinke, L. M. France, T. Bornstein, E. Knebel, and C. MacAulay. 2001. *A Modern Paradigm for Improving Healthcare Quality*. QA Monograph Series 1(1). Bethesda, MD: Quality Assurance Project (for USAID). <http://qaproject.org/pubs/PDFs/improhq601bk.pdf> (accessed Sept. 20, 2006).

WHO (World Health Organization). 2002. *Immunization, Vaccination and Biologicals, The Common Assessment Tool for Immunization Services* (Booklet 1: Assessment Methodology). Geneva: WHO.

Annex 4A. Examples of Application of Health System Performance Criteria

Benin Health Sector Assessment

Systems Elements	Health Systems Performance Criteria				
	Equity	Access	Efficiency	Quality	Sustainability
Stewardship/ Governance	Currently, stewardship (governance) structures on paper should ensure engagement of key stakeholders. System is decentralized (both government and health system) and structures exist for local input; so it should be able to ensure equity and access to care.		Disrespect of rules and inappropriate behavior of health systems actors reduce efficiency in use of resources and the quality of care provided to the population.		
Financing	Government allocations appear adjusted to equalize resources; user fee system is regressive.	User fees appear to inhibit access.	Delays in payments from treasury probably increase costs. Large amounts of funding go into malaria and AIDS but not strengthening health systems and are often not well coordinated.	Lack of resources affects ability to have equipment, maintenance, and human resources.	Many sources of financing depend on donors who come and go, or on community resources that are already stretched.
Service delivery	Physical distribution of facilities is fairly equitable.	Barriers to access exist: financial, geographic access to needed MCH and other services.		Low quality caused by noncompliance with standards, inadequate equipment and lab capacity; referral system not operational; and poor patient-provider interaction.	Institutional capacity for quality assurance is needed.

Systems Elements	Health Systems Performance Criteria				
	Equity	**Access**	**Efficiency**	**Quality**	**Sustainability**
Human resources management	Distribution of human resources is very inequitable.	Access to care is inhibited by lack of competent personnel in rural and distant facilities.	Often inefficient use of personnel caused by lack of human resources planning and coordination.	Quality of care affected by lack of access to qualified personnel and provider behavior.	Weak capacity to sustain personnel through community financing system and social measure financing.
Pharmaceutical management	Regressive system for distant facilities for pharmaceutical distribution; access to private pharmacies uneven; otherwise access to essential medicines fairly equitable.	Use of essential medicines allows financial access; physical access depends on stock-outs. Selling medicines illegally reduces access.	High expenditures on medicines suggest inefficiencies.	The system as designed should generally be able to ensure the medicines and supplies needed for quality care; however, lack of capacity at the NDQCL affects the quality of medicines available.	The pharmaceutical system, particularly within the public sector, is self-sustaining for the most part, though the institutional capacity at lower levels needs strengthening.
Health information systems	Current system measures geographic equity but not other measures of equity to aid in decision making.	Current system measures only infrastructure access (and not access to qualified personnel for the various types of services).	Some parallel systems exist. HIS is not fully exploited at lower levels.	No routine measures of the quality of care are included in HIS.	Institutional capacity exists, but additional financial resources are needed.
Private sector	Distribution of private sector is very inequitable.	Access to private sector is very limited for a large portion of the population. Private sector financing mechanisms sometimes allow greater financial access (credit).	In some areas, overlap exists between public and private, or private and private. Private sector could play a bigger role in public health programs if MoH took greater advantage.		The large amount of resources currently spent in the private sector relative to the resources available creates a challenge for the long-term growth and sustainability of this sector.

Source: Adeya and others (2007 pp. 85-86).

Summary of Angola Health System Assessment Findings

<table>
<tr><th rowspan="2">Health Subsectors</th><th colspan="5">Health System Performance Indicators</th></tr>
<tr><th>Equity</th><th>Access</th><th>Efficiency</th><th>Quality</th><th>Sustainability</th></tr>
<tr><td>Governance</td><td colspan="5">Power is concentrated in the executive branch and is very top-down, despite decentralization. The legal framework governing the health sector is relatively detailed and clear. Regulations are in place, but enforcement is weak. The MOH articulates sector plans that would address priority services and improve health system performance across all five indicators, but implementation is incomplete. Decisions about resource allocation and implementation are inconsistent with stated plans and priorities. There is little experience or mechanisms for accountability. Some provinces and municipalities working closely with private nonprofit organizations on health issues.</td></tr>
<tr><td>Financing</td><td>Pattern of regressive allocation of public assets and resources to an elite minority, at the expense of larger population</td><td>Due to inadequate funding of primary health care (PHC), health centers and posts charge user fees that are a financial barrier to access.</td><td rowspan="2">40% of public health financing allocated to tertiary care; only 27% to primary and secondary care

Misallocation of resources (funds, drugs, human resources, facilities) away from highest burdens of disease</td><td rowspan="3">Norms, protocols, and training efforts are in progress.

However, lack of supplies, drugs, and supervision at PHC level severely weakens quality of service delivery.</td><td rowspan="2">External health financing is lower (8%) than other sub-Saharan African countries (20%). Due to mineral wealth, Angola theoretically has the resources to sustain its health system, and even increase health financing.</td></tr>
<tr><td>Human Resources/ Facilities</td><td rowspan="2">Staff, facilities, and drugs concentrated in hospital care, not PHC that would most benefit the 60% of the population below the poverty line</td><td>Estimated 60% of population is without physical access to any public facilities.</td></tr>
<tr><td>Drugs</td><td>Severe stockouts of essential drugs</td><td>Leakage of essential drugs into informal market</td><td>Essential drug procurement dependent on donors.</td></tr>
<tr><td>HIS</td><td colspan="2">Health information is incorporated into MOH plans but since the plans are not fully funded and implemented, the HIS does not effectively promote equity and access</td><td>Parallel information flows

Information not used at lower levels</td><td>HIS not yet used for quality assurance

Data quality is unknown.

Lack of forms, calculators, supervision at lower levels</td><td>HIS that are not used by the staff who collect and aggregate the data are usually not sustainable</td></tr>
<tr><td>Private Sector</td><td colspan="3">Large employers, nongovernmental organizations, and religious groups are filling an important gap in service delivery contributing to equity, access and efficiency.</td><td>No data</td><td>Very likely sustainable with continued economic growth</td></tr>
</table>

Source: Connor and others (2005, p. 53).