

## Rapid Assessment of the Health System in Benin, April 2006

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**MANAGEMENT SCIENCES** *for HEALTH*

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Benin, Health Systems, Governance, Stewardship, Health Financing, Health Service Delivery, Human Resource Management, Pharmaceutical Management, Health Information System, Private Sector

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## ACRONYMS

ABIIST	Beninese Association of Nurses in Occupational Health (Association béninoise des infirmiers et infirmières de sécurité et de santé au travail)
ACE	contractual government employee (Agent Contractuel de l'État)
APE	permanent civil servant (Agent Permanent de l'État)
ARI	acute respiratory infection
CAME	Central Procurement Agency (Central d'Achat des Médicaments Essentiels et Consommables Médicaux)
CEPEPE	Center for the Promotion of and Guidance to Small and Medium Enterprises
CFA	Communauté Financière Africaine
CFC	contractual employee (paid through community financing funds)
CHD	Departmental Hospital (Centre Hospitalier Départemental)
CMS	contractual employee (paid through the "Social Measures" fund)
CNHU	National and University Hospital (Centre National Hospitalier et Universitaire)
COGECS	Health Center Management Committee (Comité de Gestion du Centre de Santé)
CPR	cardiopulmonary resuscitation
CS/ZS	Health Zone Health Committee
CSA	Arrondissement Health Center (Centre de Santé d'Arrondissement)
CSC	Commune Health Center (Centre de Santé de Commune)
DALY	disability-adjusted life year
DDS	Health Department Directorate (Direction Départementale de Sante)
DDSP	Departmental Public Health Directorate (Direction Départementale de la Santé Publique)
DHS	Demographic and Health Survey
DNPS	National Directorate for Protection in Health (Direction Nationale de la Protection Sanitaire)
DPM	Directorate of Pharmacies and Medicines (Direction de la Pharmacie et des Médicaments)
DPP	Directorate of Planning and Forecasting (Direction de la Programmation et de la Prospective)
DPT	diphtheria, pertussis, and tetanus vaccine
DRH	Human Resources Directorate (Direction des Ressources Humaines)
EEZS	Health Zone Management Team (Équipe d'Encadrement de la Zone Sanitaire)
EML	Essential Medicines List
ENAAH	National School of Sanitation and Hygiene of Benin (École Nationale des Agents d'Assainissement et d'Hygiène du Bénin)
ENIAB	National Nursing School of Benin (École Nationale des Infirmiers et Infirmières Adjoints du Bénin)

EPI	Expanded Program of Immunization
GAVI	Global Alliance on Vaccines and Immunizations
GDP	gross domestic product
HIDN	Health, Infectious Diseases and Nutrition [USAID]
HIPC	Heavily Indebted Poor Countries (Initiative)
HIS	health information system
HZ	Zonal Hospital (Hôpital de Zone)
IEC	information, education, and communication
INMES	National Medico-Social Institute (Institut National Médico-Social)
INSAE	National Institute of Statistics and Economic Analysis (Institut National de la Statistique et de l'Analyse Économique)
MCC	Millennium Challenge Corporation
MCH	Maternal and Child Health
MCZS	Coordinating Physician of the Health Zone (Médecin Coordinateur de la Zone Sanitaire)
MHO	mutual health organization
MMR	Maternal Mortality Ratio
MoH	Ministry of Health
NDQCL	National Drug Quality Control Laboratory
NGO	nongovernmental organization
ORTB	national television channel
PHC	Primary Health Care
PROSAF	Promotion Intégrée de Santé Familiale
QAP	Quality Assurance Project
RAC	<i>réseau aérien de communication</i>
RPM Plus	Rational Pharmaceutical Management Plus (Program)
SESCQ	Registration, Statistics, and Quality Assurance Service (Service d'Enregistrement, de Statistique et de Contrôle de Qualité)
SIMR	Intergrated Disease Surveillance and Response System (Système Intégré de Surveillance des Maladies et de la Riposte)
SNIGS	Système National d'Information et de Gestion Sanitaire (National Health Management Information System)
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
USD	U.S. dollar
UVS	Village Health Unit (Unité Villageoise de Sante)
WHO	World Health Organization
WHR	World Health Report
XOF	CFA franc



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The authors would also like to thank the prefects, departmental directors of health, heads of the health zones, and mayors; medical personnel at central, intermediate, and peripheral levels; and representatives of bilateral and multinational organizations as well as of the private sector near and far who participated in the assessment.

Finally, we must thank the USAID Mission in Benin for its availability and advice during the entire course of the assessment.



## SECTION 1: INTRODUCTION

At the request of the U.S. Agency for International Development (USAID), a four-person team conducted a rapid assessment of the Benin health system April 17–29, 2006. The team was composed of team leader Grace Adeya of the Rational Pharmaceutical Management (RPM) Plus Program, Alphonse Bigirimana of MEASURE Evaluation, Karen Cavanaugh of USAID/Health, Infectious Diseases and Nutrition (HIDN), and Lynne Miller Franco of the Quality Assurance Project (QAP/Workforce Development). Alphonse Akpamoli, a local consultant, provided assistance with interviews, documents, and logistics, as well as orientation to the team. In addition, a ministerial technical committee provided overall guidance. This committee was composed of senior directors and was chaired by the General Secretary.<sup>1</sup>

The purpose of the assessment was to assist the Ministry of Health (MoH) in identifying strengths and weaknesses in the health system and providing reflections on priority areas for health systems strengthening in the development of the new National Health Development Plan and National Health Policy and Strategy documents. The assessment attempts to provide an integrated view of the health system by examining the range of health system components (governance/stewardship, health financing, health service delivery, human resources, pharmaceutical management, information systems, and private sector engagement), analyzing the most important questions about each component, and synthesizing the effect of performance of these components on the system overall.

In implementing this assessment, the team tested a new approach for health systems assessment, developed as part of USAID/HIDN's global Mainstreaming Health Systems Strengthening Initiative.<sup>2</sup> The approach was conceptualized in early 2005 and first pilot-tested in Angola in August 2005. The tool was then refined and updated in fall 2005. Benin constitutes the second formal testing of the tool. Because USAID/Benin has just finalized its new strategy statement and awarded a new bilateral contract in health and Benin has a newly elected government, the testing of the assessment tool coincides with a transition in the Benin context.

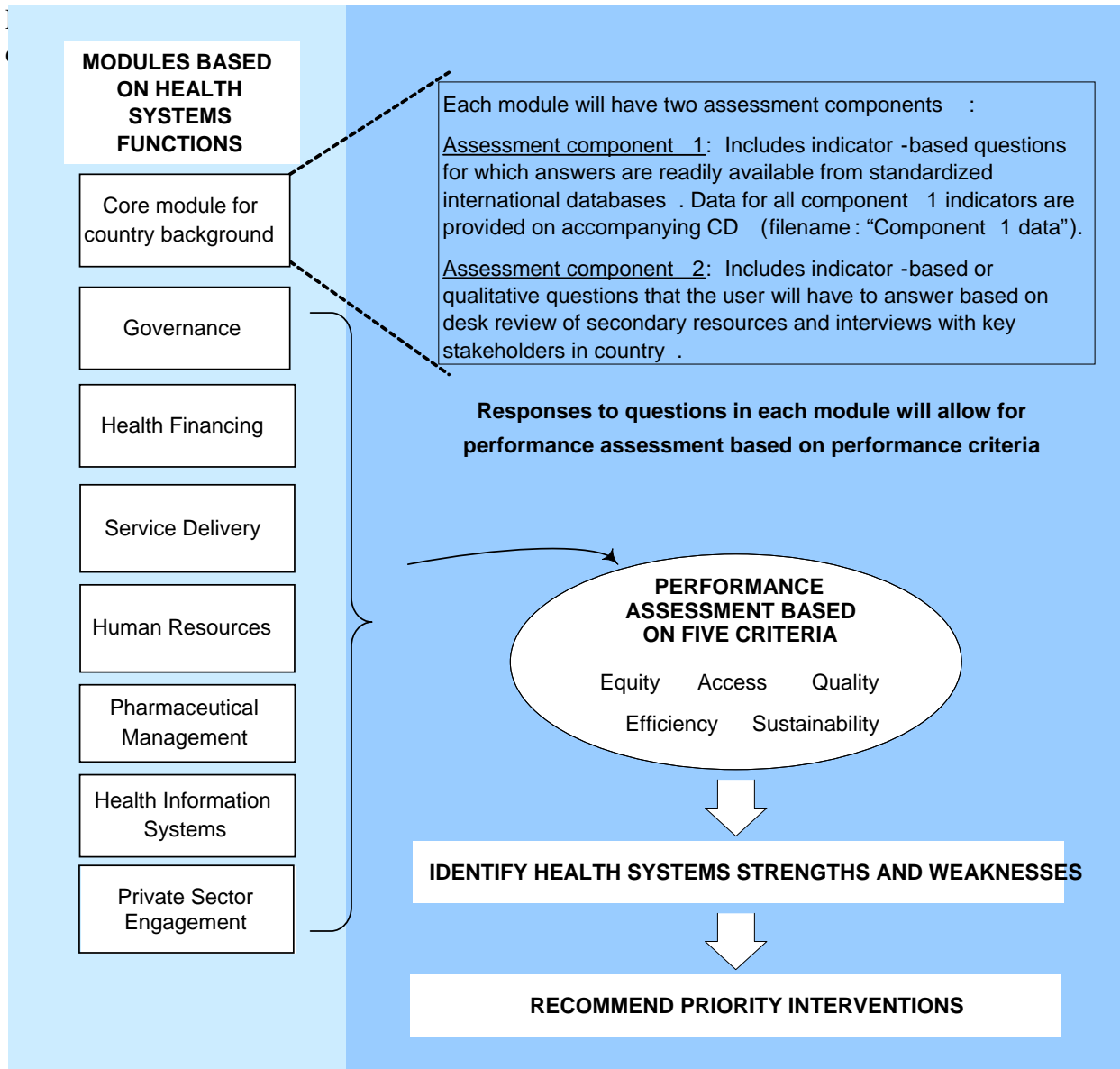
This report begins with a description of the context in which Benin's health system operates (Section 2), and a description of the health system itself (Section 3). Section 4 presents the findings related to each of the seven health system elements assessed: governance/stewardship, health financing, health service delivery, pharmaceutical management, human resources management, health information systems, and engagement of the private sector. Section 5 presents priority options of interventions to address some of the identified weakness for consideration. Additional options are included in Annex 1.

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<sup>1</sup> This committee was established by Ministerial Order no. 1268.

<sup>2</sup> The purpose of this mainstreaming initiative is to find new, cost-effective ways to put the combined knowledge, expertise, and tools of USAID's Global Health Bureau health systems strengthening projects at the service of USAID's large bilateral health services delivery projects to improve these projects' capacity to achieve USAID health impact objectives.

## Methodology: The Health Systems Assessment Approach



Source: Adapted from Islam, M., ed. 2006. *Health Systems Assessment Approach: A How-To Manual*. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20 Project (HS20/20), Partners for Health Reformplus, Quality Assurance Project, and Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

**Figure 1. Framework for the health systems assessment approach**

## **Preassessment Activities**

The assessment team had two preparatory meetings (in February and March 2006) before traveling to Benin to familiarize the team members with the assessment methodology and discuss the plans for data collection. A local consultant, Mr. Alphonse Akpamoli, was retained and worked with the team to schedule the interviews and collect the requested supporting documents. Before traveling to the field, the team members reviewed several documents accessed online from the World Health Organization (WHO), World Bank, USAID, and other organizations. Based on these documents, the core module was completed prior to the team's trip.

## **In-Country Assessment**

Data collection in country occurred from April 15 to 29, 2006 (see Annex 2). Each member of the four-member team was responsible for collecting data for two modules, one module with which they had some familiarity or expertise, and a second module with which they had less familiarity. Data collection in country consisted of interviews and document review at the central level and a field visit to conduct interviews at the intermediate and peripheral levels of the health system. Two field sites, Mono/Couffo and Zou/Collines, were selected at the suggestion of the ministerial technical committee. Two members and a representative of the MoH traveled to the selected zones April 23–25, 2006, to conduct the interviews.

Very preliminary findings from the assessment were presented to the donor coordination partnership on April 26, 2006; a summary of preliminary findings and conclusions was presented to the Minister of Health on the evening of April 27, 2006, and to the USAID Mission Director on April 28, 2006. A more complete set of findings, conclusions, and possible actions were presented and discussed at a stakeholder workshop (more than 40 participants) organized in collaboration with the MoH on April 28, 2006.

## **Challenges**

The retrieval of documents for the preassessment desk review and for review in country proved to be one of the most challenging aspects of the assessment. Most of the documents were provided only in the second week of the visit. It may be useful to consider adjusting the assessment methodology to allow for a one-week in-country desk review by one team member or representative.

The in-country assessment began over the Easter weekend (a four-day weekend in Benin) and ended just before the International Labor Day holiday (May 1, a three-day weekend). Interviews with most of the key stakeholders could begin only on April 19, 2006; therefore the team effectively had only three days to complete the central-level interview.



## SECTION 2: BACKGROUND

### Overview

Benin is a geographically small country (114,763 square kilometers), nestled between Nigeria, Niger, Burkina Faso, and Togo on the West Coast of Africa (see Figure 2), and with an estimated population of 7,288,091 in 2004. It achieved independence from France in 1960 and is among the smaller countries in Africa. It includes a multitude of ethnic and linguistic groups.



**Figure 2. Map of Benin**

Benin has been ranked 161 of 177 countries on the United Nations Human Development Index (2005), and about a third of the population lives below the poverty line. Twenty percent of the population is categorized as extremely poor. As shown in Table 1, compared with its neighbors and other African countries, Benin has a higher rate of population growth and a higher percentage of its population lives in urban areas. Population density ranges from 19 to 8,641 inhabitants per square kilometer. Gross domestic product (GDP) per capita is slightly higher than the West African average but lower than Sub-Saharan Africa overall. Life expectancy is greater and infant mortality lower than those of its neighbors; however, Benin's Maternal Mortality Ratio (MMR) is higher than the West African or Sub-Saharan Africa averages.

**Table 1. Comparison of Benin to Surrounding Countries on Selected Indicators**

Indicator	Benin	West Africa (average: 15 countries)	Sub-Saharan Africa (average: 56 countries)
Population	7,300,000	17,300,000	14,600,000
Percent population urban	45%	39%	37%
Population growth	2.5%	2.2%	2.0%
GDP per capita	USD 389	USD 316	USD 861
Life expectancy (years)	53	47	48
Infant Mortality Rate per 1,000 live births	91	108	93
MMR per 100,000 live births	474	357	417

Sources: World Bank *World Development Indicators* (2005), with the exception of MMR, which comes from the Benin General Census (2003).

Educational levels remain low in Benin, particularly in rural areas. Among women, 64 percent have had no schooling (range 27 percent in Cotonou, the commercial center of the country, to 81 percent in the Atacora<sup>3</sup>). Among men, the situation is somewhat better: only 40 percent have

<sup>3</sup> The Atacora is one of Benin's 12 departments. It is one of the poorest and least densely populated departments in Benin.

not had schooling (ranging from 6 percent in Cotonou to 61 percent in the Atacora). The percentage of children attending school has increased between 1990 and 2000 from 65 percent to 81 percent for boys and from 32 percent to 58 percent for girls.

## Political and Macroeconomic Environment

Benin was one of the first African countries to effectively transition from a military government to a pluralistic political system, and since 1991, the country has held four presidential elections with a peaceful transfer of power. The president is elected every five years, and the most recent elections (March 2006) brought a newcomer and political outsider to power. The current government consists of 17 ministries and 5 subministries. The legislative branch is made up of a single National Assembly of 83 seats, with members elected every four years. The most recent National Assembly elections took place in March 2003 and are to be held again in 2007. Benin has a very active media and a relatively free press: in its Press Freedom Index, Reporters without Borders ranked Benin 27 of 167 countries worldwide, and Benin ranks first of countries in Africa as having the freest press.<sup>4</sup>

Benin is divided into 12 departments,<sup>5</sup> each with a governor (*préfet*) named by the President. The average size of a department is 600,000 inhabitants (range 373,000 in Donga to 856,000 in Atlantique). The number of communes per department varies from 1 (Cotonou in the Littoral) to 9 (Atacora, Ouémé, and Zou), for a total of 74 communes and 3 autonomous urban areas (Cotonou, Porto-Novo, Parakou). Communes are subdivided into a total of 546 arrondissements and 3,747 villages.

Territorial reforms introduced in 1999 called for the department to be the sole level of government deconcentration and the commune the sole level of decentralization.<sup>6</sup> The department has supervisory authority over the communes in terms of assistance, advice, and legal reviews. Communes are governed by a Commune Council elected by universal suffrage. In December 2002, Benin held its first local government elections since the 1970s, electing Commune Councils, which in turn elect their mayor. Communes have been given power in the areas of local development, planning, housing, infrastructure, transportation, environment, health, education, literacy, commercial services, economic investments, and social and cultural programs. The commune has financial autonomy over its state budget allocation and revenues generated locally.

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<sup>4</sup> The Press Freedom Index measures the state of press freedom in the world. It reflects the degree of freedom journalists and news organizations enjoy in each country, and the efforts made by the state to respect and ensure respect for this freedom. It is based on 50 criteria for assessing every kind of violation directly affecting journalists (such as murders, imprisonment, physical attacks, and threats) and news media (censorship, confiscation of issues, searches, and harassment), and the degree of impunity enjoyed by those responsible for such violations. It also takes account of the legal situation affecting the news media, the behavior of the authorities toward the state-owned news media and the foreign press, and the main obstacles to the free flow of information on the Internet.

<sup>5</sup> Until 1999 there were 6 departments. Each of these was split into two, making officially 12 departments. However, the 12 departments are actually managed currently by 6 *préfets*, each in charge of two departments.

<sup>6</sup> *Decentralization* refers to a transfer of authority and responsibility from the central to field offices of the same agency. *Deconcentration* here refers to transfer of authority and responsibility from the central government to lower-level autonomous units of government through statutory or constitutional measures. This process is often referred to as devolution.



Communes' powers in health, as specified in Article 100 of Law 97-029 (1999), include building, equipping, repairing, and maintaining public health facilities at the arrondissement level only (Centres de Santé d'Arrondissement [CSA; Arrondissement Health Center], isolated maternities and dispensaries, and village health units), but the commune has no powers to manage these structures.

Since the transition to a democratic government in 1990, Benin has undergone a remarkable economic recovery. A large infusion of external investment from both private and public sources alleviated the economic difficulties of the early 1990s caused by global recession and persistently low commodity prices (although the latter continue to affect the economy). The manufacturing sector is confined to some light industry, which is mainly involved in processing primary products and producing consumer goods. The service sector has grown quickly, stimulated by economic liberalization and fiscal reform. Membership in the Communauté Financière Africaine (CFA) franc zone offers reasonable currency stability. However, Benin's economic future has not looked as promising over the previous two to three years, among other things, because of low cotton prices (cotton accounts for 13 percent of GDP). The budget deficit is expected to widen. Currently, about 95 percent of the workforce is in the informal sector.

In March 2003, the World Bank and International Monetary Fund agreed to support a comprehensive debt reduction package for Benin under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative. Debt relief under the HIPC Initiative amounts to approximately 460 million U.S. dollars (USD). Benin received USD 27.1 million in 2002 and USD 32.9 million in 2003. The HIPC Initiative will reduce Benin's debt-to-export ratio, freeing up considerable resources for education, health, and other antipoverty programs.

### Major Causes of Morbidity and Mortality

Benin's epidemiological profile is marked by a high rate of infectious diseases, followed by nutritional issues. Table 2 presents the major causes for outpatient visits and hospitalizations in public and a few private facilities for 2004.

**Table 2. Primary Causes of Outpatient Visits and Hospitalizations in Benin, 2004**

Outpatient Consultations		Hospitalizations	
Under Five	Overall	Under Five	Overall
Malaria	Malaria	Malaria	Malaria
ARI	ARI	Anemia	Anemia
Diarrhea	Gastrointestinal	ARI	Diarrhea
Anemia	Injuries	Diarrhea	ARI
Gastrointestinal	Diarrhea	Malnutrition	Injuries

*Source:* Based on Système National d'Information et de Gestion Sanitaire (SNIGS) data from public sector facilities and some private facilities in 2004.

*Note:* ARI = acute respiratory infection.

The 2004 estimate of HIV/AIDS prevalence is 2.0 percent (2.4 percent in urban areas and 1.6 percent in rural areas). Benin is also increasingly seeing the rise of noncommunicable diseases, such as heart disease and cancer. Table 3 shows the 2002 WHO data on death rates and disability-adjusted life years (DALYs)<sup>7</sup> for Benin. The age-adjusted rates allow for comparison with other countries with other age structures. However, the unadjusted rates, which reflect absolute numbers, more accurately reflect Benin's morbidity and mortality profile and show that acute respiratory infections (ARIs) and malaria are the major causes of death and disability. They also show the effect of noncommunicable diseases, injuries,<sup>8</sup> and other health issues (perinatal causes).

**Table 3. Causes of DALYs and Death, 2002**

Major Causes of DALYs (Age Adjusted)	Major Causes of Death (Age Adjusted)	Major Causes of DALYs (Not Age Adjusted)	Major Causes of Death (Not Age Adjusted)
ARIs	Cardiovascular diseases	ARIs	ARIs
Malaria	ARIs	Malaria	Malaria
Injuries	Cancer	Injuries	Cardiovascular diseases
HIV/AIDS	Malaria	Diarrhea	Diarrhea
Cardiovascular diseases	Injuries	Perinatal causes	Injuries
Neuropsychiatric diseases	HIV/AIDS	HIV/AIDS	HIV/AIDS
Diarrhea	Diarrhea	Neuropsychiatric diseases	Cancer

Source: WHO. 2002. Global Burden of Disease Estimates. <http://www.who.int/healthinfo/bodestimates/en/>.

Note: ARI = acute respiratory infection.

<sup>7</sup> The DALY is a health gap measure that combines information on the effect of premature death and of disability and other nonfatal health outcomes. One DALY can be thought of as one lost year of "healthy" life, and the burden of disease as a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability.

<sup>8</sup> About a third of the DALYs and deaths are related to road accidents.

## SECTION 3: OVERVIEW OF THE HEALTH SYSTEM IN BENIN

The health system includes “all the organizations, institutions, and resources that are devoted to producing health actions.”<sup>9</sup> Thus, the health system encompasses activities at the central, regional, district, community, and household levels, in both the public and private sectors.

### Structure of Health Care System

The Ministry of Health, by government decree (No. 2001-422), is responsible for the design and implementation of all activities emanating from government policies related to health. Its mission is to improve the health conditions of families through a health system that covers the poor and indigent, and its objectives are to—

- Improve the quality of and access to health services
- Improve community participation in and use of health services
- Improve coverage for the population in general and the poor in particular

The Ministry of Health has recently changed its name (from the Ministry of *Public Health*) to emphasize the major role of the private sector in ensuring health care to the population of Benin. A reorganization of ministry directorates occurred in 2005 (Figure 3). This organization expanded the number of directorates, allowing for an additional and special focus on hospitals and health zones.

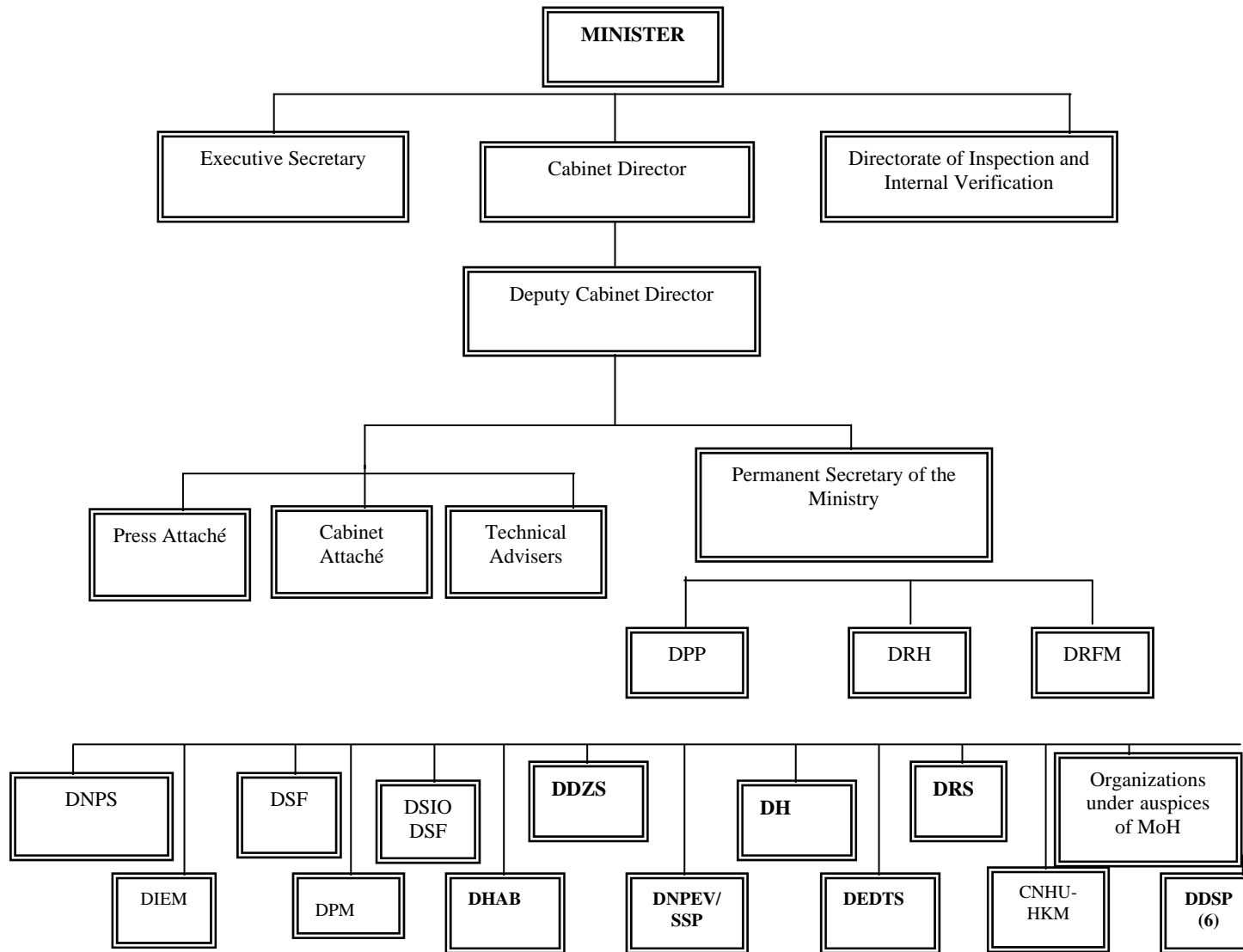
### Decentralization and Organization of Service Delivery

Decentralization of the health sector can be categorized as deconcentration (transfer of authority and responsibility within the same agency). In the 1997–2001 *National Health Policy and Strategies for Health Sector Development*, the Ministry of Health laid out the reorganization of the health sector pyramid, which consists of three levels—

- **Central:** Ministry of Health and its central Directorates; National Referral Hospital (Centre National Hospitalier et Universitaire; CNHU)
- **Intermediate:** Departmental Directorates for Health, Departmental referral hospitals (Centre Hospitalier Départemental; CHD)
- **Peripheral:** Health Zones, which contain the following health facilities: Zonal referral hospital (Hôpital de Zone; HZ), Commune Health Centers (Centre de Santé de Commune; CSC), Arrondissement Health Centers (CSA), private health facilities, village health units

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<sup>9</sup> World Health Organization. 2000. *World Health Report 2000: Health Systems: Improving Performance*. Geneva: WHO.



Directorates: DPP: Planning and Forecasting DRH: Human Resources; DRFM: Financial and Material Resources; DIEM: Maintenance of Infrastructure and Equipment; DNPS: Health Protection; DHAB: Hygiene and Basic Sanitation; DSIO: Nursing and Midwifery Care; DNPEV-SSP: EPI/PHC; DDZS: Health Zone Development; DEDTS: Diagnostics and Blood Transfusion; DPM: Pharmacies and Drugs; DH: Hospitals; DRS: Scientific Research; CNHU: National Teaching Hospital; DDSP: Departmental Public Health.

**Figure 3. Organizational chart of the Benin Ministry of Health, 2005**

The country has been divided into 34 health zones, each covering an average population of 210,000 (range 110,000 in Cotonou I/IV and Cote/Ouinhi/Zangnanado to 410,000 Abomey-Calavi/Soava). Health zone borders do not necessarily correspond to the administrative divisions of the country (the commune), because many of those were too small to justify construction of a referral hospital. Health zones contain from one to four communes, with an average of 2.25 communes per health zone (Figure 4).

The health zone concept is designed to—

- Ensure access to care and guarantee quality of basic and first referral level care
- Ensure rational and efficient management of available resources
- Contribute to the process of decentralization
- Reinforce community participation
- Develop a partnership between the public and private sectors

The first level of facility-based health care in the public sector starts with the Arrondissement Health Center, which should be staffed by a nurse, a midwife, and some auxiliary staff. The Commune Health Center is to be staffed by a doctor, several nurses, and midwives and offers a wider range of health care services. The Zonal Hospital is the first referral level of specialist care. The HZ should be staffed by a pediatrician, a surgeon, and an obstetrician-gynecologist. Within a health zone, there are private clinics and doctor's offices, pharmacies, and so forth. These can be for profit or not for profit. The health zone is responsible for overseeing the whole range of providers (public and private) operating in the zone and planning for the best use of resources within the zone to achieve health objectives. Above the health zones are two additional layers of referral care—the Departmental Hospital and the Central Hospital.

The health zone contains two management bodies: (1) the Health Zone Health Committee (CS/ZS), the ultimate representational and decision-making body, and (2) the Health Zone Management Team (Équipe Encadrement Zone Sanitaire; EEZS), which provides technical direction, management, and coordination of zonal activities. CSAs and CSCs are managed by Health Center Management Committees (Comité de Gestion du Centre de Santé; COGECS). The HZ is managed by a hospital management committee (if public) or a hospital board (if private).

It should be noted that the health zone represents a conscious reorganization of the health system, which had previously used the commune as the peripheral management level. The head doctor of

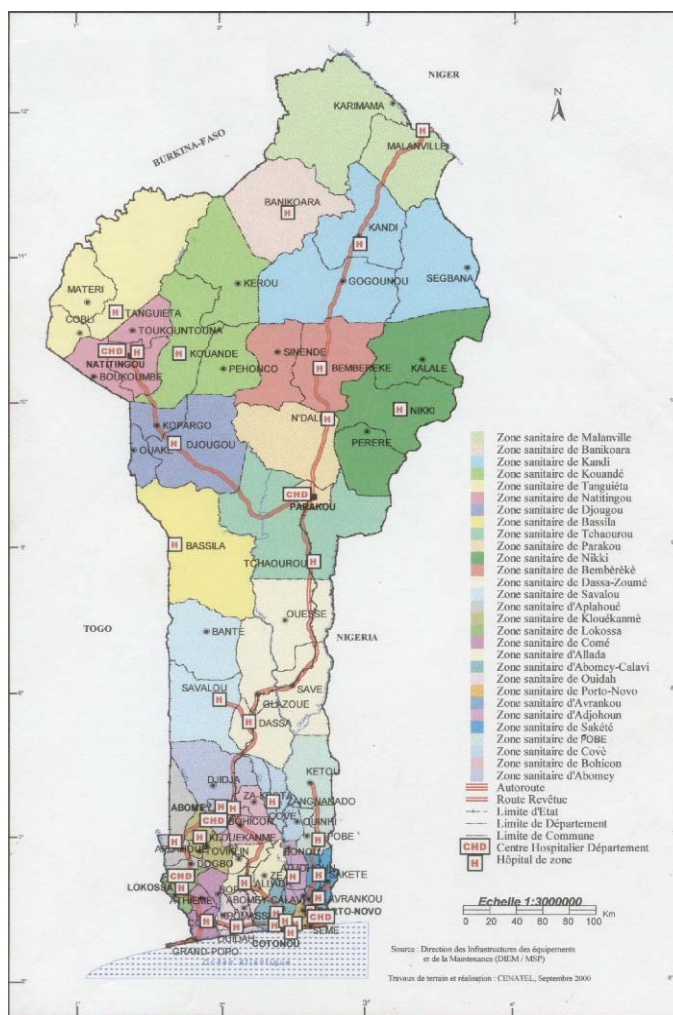


Figure 4. Map of health zones showing communes covered

the commune was responsible for management and supervision of public health facilities in his or her commune and reported directly to the Departmental Director for Public Health and to the *sous-préfet*.

Starting in 2004, the health zones were provided with direct management responsibility for their state allocated budgets (*credits délégués*). A 2005 evaluation of all 34 health zones indicated most EEZSs and CS/HZs meet regularly (80 percent and 73 percent, respectively). However, only a quarter of the HZs have trained their COGECSs on their roles.

Table 4 presents an assessment of decentralization of various health system functions. With the reorganization of the health system pyramid and the administrative decentralization, the Health Zone and the Commune Councils have fairly effective control of many aspects. However, human resources management is mainly in the hands of the central level (and often outside of the health sector—through the Civil Service or the communes [*contrats sur mesure sociale*]). Information from interviews and reports indicates remaining issues of misunderstanding and acceptance of the health zone concept among the communities, the political and administrative authorities, and many health workers themselves, and continuing tensions between the communes and the health zones on management of certain aspects.

**Table 4. Assessment of the Level of Decentralization in Benin's Health System**

Health System Functions	Level of Government			
	National MoH	Subnational (Department)	Health Zone	Commune (Administration)
<b>Financing</b>				
- Revenue generation and sources	—	—	—	X
- Budgeting, revenue allocation	XX	—	X	X
- Expenditure management and accounting	XX	X	X	X
- Financial audit	XX	X	X	X
<b>Human Resources</b>				
- Staffing (planning, hiring, firing, evaluation)	XX	X	X	—
- Contracts	X	X	X	X
- Salaries and benefits	X	X	X	X
- Training	XX	X	XX	—
<b>Service Delivery and Program/Project Implementation</b>				
- Hospital autonomy	X	X	XX	—
- Defining service packages (primary, tertiary)	XX	—	—	—
- Targeting service delivery	XX	—	X	—
- Setting norms, standards, regulation	XX	—	—	—
- Monitoring and oversight of service providers	X	X	XX	—
- User participation	—	—	X	—
- Managing insurance schemes	—	—	—	—
- Contracting	X	—	—	—
- Payment mechanisms	—	—	X	—
<b>Operation Maintenance</b>				
- Medicines and supplies (ordering, payment, inventory)	X	—	XX	—
- Vehicles and equipment	X	X	XX	—
- Facilities and infrastructure	XX	X	XX	X
<b>Information management</b>				
- Health information systems design	XX	—	—	—
- Data collection, processing, and analysis	XX	XX	XX	—
- Dissemination of information to various stakeholders	XX	X	XX	—
<b>Political or democratic participatory mechanisms and citizen feedback systems</b>				
	—	—	XX	XX

Source: Analysis performed by assessment team based on document review and interviews.

Notes: XX = extensive; X = some; — = limited or none.





## SECTION 4: SUMMARY OF THE ASSESSMENT FINDINGS

### Stewardship

Stewardship (governance) in the health sector is defined as “the careful and responsible management of the well-being of the population.”<sup>10</sup> The overall governance in the country as a whole will influence governance of the health sector. The key dimensions for review in developing a profile for stewardship are information/assessment capacity, policy formulation and planning process, social participation in the system, and accountability and regulatory environment.

### *Information/Assessment Capacity*

Stewardship requires access to information about trends in health and health systems performance that is then used for planning and decision making. The health management information system in Benin (Système National d'Information et de Gestion Sanitaire, or SNIGS) has been correctly identified by the MoH as one of its fundamental tools for the planning, coordination, and supervision of the national health policy. The SNIGS has been operating since 1990 and is managed by the Directorate of Planning and Forecasting (DPP). It currently collects three sets of information—

- Information on the management of the health system, including information on human resources, finances, equipment and materials, and pharmaceutical products
- Information on the curative services of the health system, including information on the number and type of consultations and the corresponding diagnosis and treatment provided; hospitalizations; surgeries performed; diagnostic activities (laboratory services, diagnostic imaging services, and transfusion services); and surveillance data, especially data on the major transmissible diseases
- Information on the provision of maternal and child health services, family planning services, and nutrition services by the health system

The SNIGS is described in greater detail under Health Information Systems. The DPP publishes an Annual Health Statistics Report (*Annuaire des Statistiques Sanitaires*) that summarizes the information collected by the SNIGS for that year. The 2004 report<sup>11</sup> is available, and the DPP is currently working on the 2005 report. This statistical report is one of the principal documents used in the planning process. However, because its publication does not come until several months into the following year (because of the need to verify and correct errors), the peripheral levels rely on the SNIGS data that they have entered at the health zone level for planning purposes.

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<sup>10</sup> Islam, M., ed. 2006. *Health Systems Assessment Approach: A How-To Manual*. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20 Project (HS20/20), Partners for Health Reformplus, Quality Assurance Project, and Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

<sup>11</sup> Ministère de la Santé Publique. 2005. *Annuaire des Statistiques Sanitaires 2004*. République du Bénin.

The DPP also publishes “Rétro-snigs,” a quarterly newsletter that presents a summary of key statistics for dissemination to the intermediate and peripheral levels; however, how many people actually read it is not clear. One of the respondents interviewed indicated that people do not like to read, so “Rétro-snigs” is not a useful tool for providing feedback. Most of them preferred quarterly feedback meetings, as organized by the Expanded Programme on Immunization/Primary Health Care (EPI/PHC) program.

SNIGS is not the only information that is useful for planning and decision making. Recognizing the challenges in disseminating information and reports generated both by the MoH and its partners, the MoH established a Documentation Center within the DPP in 1992. The center has two primary objectives—

- Collect, manage, and disseminate health care information
- Act as a knowledge management center for the MoH

This center has the potential to provide access to the numerous studies and reports that have been done and could contribute better to planning and decision making if people were aware of the center’s existence and had access. To achieve those objectives, the center has hired four employees, all trained in information management by the local university. Nevertheless, it faces several challenges, including the following—

- The center has depended on donor funding since its inception. The Swiss Cooperation and the World Bank provided support at the center’s inception, and WHO has been instrumental in providing support for the installation of a computerized bibliography, but funding is not adequate.
- The center is located within the MoH compound in Cotonou, and its activities and reach are currently limited to the central level.
- The center does not receive documents from the MoH and other health partners as required, despite repeated decrees sent out to all departments asking them to submit all reports they publish. It therefore cannot really function as the knowledge management resource envisioned.
- A lack of awareness exists about the center, even within the MoH. Use of the center has stabilized at about 1,300–1,500 visits a year. In 2004, the center had 1,330 visitors, including 456 new visitors. Only 5 percent of the visitors were personnel working for the MoH. Most of the center’s users are students and others associated with the university. The highest number of visitors occurred in 2003 when a publicity campaign was undertaken to raise awareness of the center.<sup>12</sup>
- Some potential conflicts exist in the mandates of the documentation center; the newly established Directorate of Health Research; and the Service for Studies, Strategies, and Future Planning of the DPP. All three are charged with documenting studies planned and

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<sup>12</sup> Ministry of Health. 2004. *Report of the Activities of the Documentation Center*.

realized within the health sector. A review of their mandates with the goal of consolidating the knowledge management activities into one center needs to occur.

### **Policy Formulation and Planning**

Stewardship requires that appropriate processes are in place to develop, debate, pass, and monitor legislation and regulations on health issues. Benin has a well-developed and highly participatory policy formulation and strategic planning process. The second iteration of the five-year Health Policy and Strategic Plan covered the years from 2002 to 2006. The planning for the development of the Third Strategic Plan (2007–2011) has already begun. The process for the development of the strategic plan begins with the evaluation of the previous plan and a review of the existing literature to identify the relevant areas for intervention. On the basis of this assessment, the DPP develops a draft plan in consultation with the other directorates of the MoH. This draft plan is then discussed with various partners, including representatives of the medical, pharmacy, and midwives boards; representatives from the nongovernmental organization (NGO) sector; private sector participants; donors; and officials at the intermediate and peripheral levels of the health system. In addition to the strategic health plan, two other policy documents have a substantial health focus: the Benin Long-Term Development Strategy for 2000–2025 (*Les Études Nationales de Perspectives à Long Terme: Bénin 2025*), which was published in August 2000, and the Poverty Reduction Strategic Plan for 2003–2005.

The National Three-Year Health Sector Development Plan 2004–2006 (*Plan Triennal de Développement du Secteur Santé. 2004–2006*) was developed by the DPP to implement the policies outlined in the three policy documents previously mentioned. In addition, this three-year development plan draws on the Government Plan of Action, the budget, and the recommendations from the reviews of public expenditures. Each health zone develops a three-year strategic plan based on this national plan, and each year each health zone develops an annual work plan based on its three-year strategic plan. One challenge with this planning process is that it does not correspond to the financial calendar; so the zonal plans are prepared without an idea of the funding available. When the funds allocated to each zone are determined, these plans have to be revised. The funds transfer from the central government does not get to the zonal level for several months after the financial year begins; so implementation of the activities usually occurs in the second half of the financial year, creating pressure to implement as many activities as possible to use up to money allocated.

Although almost all those interviewed praised the policy development process as being highly participatory, several interviewees, particularly those in the private sector, felt that they were not fully involved in the implementation of the approved policies. The MoH has recently established a joint partnership organization (Organe Paritaire de Partenariat) and a Partnership Consultation Framework for the public and private sectors (Cadre de Concertation Secteur Publique/Secteur Privée) to improve the coordination of the activities in the public and private sectors. Additional discussion of private sector engagement in the health sector is found in the Private Sector Engagement section.

## **Donor Contributions and Coordination**

Numerous partners contribute to the health sector. In addition to traditional international partners (WHO, United Nations Population Fund, United Nations Children's Fund [UNICEF], and the World Bank); the Global Fund to Fight AIDS, Tuberculosis and Malaria; Global Alliance on Vaccines and Immunizations (GAVI); and the African Development Bank are contributors. Bilateral donors include Belgium, Canada, China, France, Germany, Japan, Switzerland, and the United States. The World Bank and the European Union provide budgetary support.

The donor community and the Government of Benin have established a coordination mechanism. Within this mechanism, there is a group for the health sector, chaired by the Minister of Health. It meets routinely twice yearly, or additionally as needed. The partners select a point person among them (currently the Swiss Cooperation) who serves as the spokesperson for the partners and the point of communication for the ministry. The partners are currently setting up agreements among themselves for how they will work together and how they will work in concert with the principles of the Paris Declaration on Aid Effectiveness<sup>13</sup> (March 2005). Partners say they try to follow the strategies and policies laid out in the National Three-Year Health Sector Development Plan 2004–2006.

With the exception of work in the HIV/AIDS field, interviews indicate that the donors are becoming better coordinated. Some examples of coordination activities include seeking to orient new donors, listing studies conducted to avoid duplication, harmonizing where possible procedures and policies, and sharing results at donor meetings. Annually, donors participate in the MoH's performance review of the health sector.

Interviews at the central level indicate that the Ministry of Health is not yet satisfied with the level of donor transparency. The MoH feels that it does not have a good handle on how much various donors are contributing to the health sector (through budget support) and how to account for this funding when it measures performance against its program budget.

## **Social Participation and System Responsiveness**

This dimension of stewardship assesses the involvement of a broad range of stakeholders in understanding health issues and in planning, budgeting, and monitoring health sector actions, as well as the health systems' responsiveness to the input of those stakeholders. As discussed in the preceding sections, most of the key stakeholders at the central level are involved in the development of the health sector policies.

A variety of mechanisms exists to ensure the engagement of civil society and the community in management of the health system. Community participation occurs primarily through participation in the Village Health Committee (Comité Villageoise de Santé), which oversees the activities of the Village Health Unit (Unité Villageoise de Santé; UVS), the first level of health service delivery in the health system pyramid. Community participation is also ensured in the

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<sup>13</sup> The Paris Declaration, endorsed on March 2, 2005, is an international agreement to which over 100 Ministers, Heads of Agencies, and other Senior Officials adhered and committed their countries and organizations to continue to increase efforts in harmonization, alignment, and managing aid for results with a set of monitorable actions and indicators.

Management Committee of the Health Center. By decree,<sup>14</sup> the COGECS is composed of two women representatives, two youth representatives, a representative of the eminent members of the community, a representative of the elected councilors, a representative of an NGO working on health within the arrondissement, and the heads of maternity and the dispensary at the health center (these two serve as consultants to the committee).

The COGECS oversees the activities of its associated health center, including the finances of the health center. It works together with the Coordinating Physician of the Health Zone (Médecin Coordinateur de la Zone Sanitaire; MCZS) to determine the health priorities for the catchment area. These health priorities will be incorporated into the zonal, regional, and national health policies and plans. However, a large number of the members of these health management teams have not received any recent training and, as a result, capacity appears limited within most of the COGECSs to fulfill this oversight role as expected.

At the zonal level, civil societies and the members of the community are included in the zonal health management teams. The Zonal Health Committee, which oversees the health activities of the health zone, is composed of two representatives of COGECSs per commune, the mayors of the communes, and representatives of women's groups, development partners, NGOs operating in the area, private sector providers, and departmental personnel and Departmental Director for Public Health.

### **Accountability**

This dimension of stewardship assesses whether the government answers its citizens' questions and addresses negligent and corrupt actions. The health system goals, objectives, and performance targets have been clearly developed in Benin and included in key policy documents, as discussed in the earlier sections of this report. The national health policy documents and other strategic documents have been disseminated, particularly at the central level, but not necessarily well understood by all. The widespread dissemination of other documents outside the central levels of the MoH does not appear to occur in a consistent manner.

Benin has active and fairly vocal labor unions for health care workers that have been speaking out in support of greater accountability and better governance. Some level of distrust exists between these labor unions and some of the key stakeholders who feel that the labor unions are not always working in the best interests of the health system. The example often cited was the failure of a previous government attempt to contract out some of the activities of the health sector. Some interviewees felt that the intervention of the labor unions against the proposal played a role in its failure; however, other sources of political pressure clearly were also responsible for the failure. Two or three consumer protection organizations, including the consumer defense league, exist; however, none of them are specifically devoted to health care.

As mentioned in Section 2, Benin has a very active media and a relatively free press. The national media, both print and electronic, actively report on the health sector. A monthly news magazine devoted to health, "C'est Ma Vie" (It is my life), is published and distributed primarily through private pharmacies in Cotonou and Porto-Novo. Most of the articles covered in this

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<sup>14</sup> Decree no. 2005-611 of September 28, 2005.

magazine relate to women's health, and it sells out frequently (the assessment team was unable to purchase any copies at any the pharmacies in Cotonou that normally sell the magazine because they had all run out of copies). The national television channel, ORTB, regularly includes programs discussing various health issues. During International Malaria Day, April 25, 2006, which coincided with the assessment visit, ORTB ran a special prime-time program on malaria that included a segment where the Minister of Health described the new malaria treatment and prevention policy that the malaria program is currently implementing. This program, as with the other health programs observed during the visit, was less a discussion of policy and more a case of providing the public with information on the new policies.

Prioritization of health expenditures is the responsibility of the COGECS and the Zonal Health Committee. Financial reports prepared at the health facility level are reviewed and signed by the COGECS before being forwarded to the zonal level. At the zonal level, the various health facility budgets are reviewed by the zonal health committee and a zonal budget prepared for submission to the departmental level and on to the central level. These financial reports are shared in one direction only—up the health pyramid—so that the members of the COGECS do not get to see the final zonal financial report or the departmental report. Although no law prevents any member of the community from asking for and reviewing the financial documents once they reach the zonal level and beyond, in practice this does not occur. Most interviewees were unsure whether community members, or their representatives, would be allowed to see these financial documents if they requested them.

### **Regulation**

Good governance of the health sector requires sufficient capacity for oversight of safety, efficacy, and quality of health services and pharmaceuticals and sufficient capacity for enforcement of guidelines, standards, and regulations that have been developed. This aspect of governance is one of the most challenging in Benin.

The process for development and adoption of a law initiated by the government begins with the development of the draft legal document by the directorate in the MoH that will be affected by the law, in consultation with the other directorates. The draft law is then submitted to the technical council of the Minister of Health for review by the minister's cabinet. When approved by this cabinet, it is submitted to the Supreme Court for review, and then sent to the National Assembly for discussion and legislative approval. After the law has been approved by the national assembly, it is submitted to the constitutional court for final review before being signed by the President.<sup>15</sup> Ministerial decrees, in contrast, are issued based on the recommendation of the cabinet and are essentially clarifications of the health laws to aid the implementation of those laws.

Although most of the laws and regulations governing the health sector have been developed and disseminated, a culture of nonrespect of the laws appears to have little to no consequences. This sense of impunity was cited repeatedly as a key barrier to the development of an effective health care system. The limited enforcement capacity, within the MoH at the central, intermediate, and peripheral levels and within the judiciary, may have contributed in part to this sense of impunity.

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<sup>15</sup> Interviews by the authors.

An inspector-general exists within the MoH, but he has no authority to take a case directly to the judiciary and is only authorized to report it to the Minister of Health, who makes the decision whether to take the case to the judiciary. Additionally, it was suggested the system of patronage that has existed for several decades, where jobs and opportunities are directed to those who have better connections with others at higher levels of the government, has also contributed to this sense of impunity.

All medical and paramedical professionals working in Benin must be licensed by the state.<sup>16</sup> All physicians, doctors, dentists, and midwives have to be registered by their respective boards. However, because the enforcement of these laws did not really occur in the past, the Physicians Board and the Midwives Board are essentially playing catch-up in trying to get everyone registered. Private sector clinics, pharmacies, and laboratories can only be opened and operated by specific types of medical personnel.<sup>17</sup> These licenses to practice and to operate a clinic are bestowed once, although they can be revoked. The section on Private Sector Engagement describes this licensing process in more detail and efforts to engage the private sector in the regulation process. Significant regulations are also in place in the pharmaceutical sector and these are discussed in more depth in the section on Pharmaceutical Management. Currently, no system for accreditation of health facilities exists, but the MoH is planning to move in that direction.

Despite the existence of these comprehensive laws governing the licensing of health providers and the establishment of private practices, the reality is that they are not being enforced, particularly the laws governing doctors and nurses. The government continues to hire doctors without confirming that they have been registered as required by law. The biannual inspections of all private health facilities do not occur, mostly because of insufficient human and financial resources. The closure of illegal clinics is difficult, particularly in communities with few other alternatives where community pressure is cited as the main reason for keeping these illegal facilities open.

Medical malpractice laws have been developed;<sup>18</sup> however, very few cases of malpractice have been brought before the professional boards. As one interviewee explained, “It is very difficult to determine fault when something goes wrong in the care of a patient. The doctors and nurses are usually overworked; they do not always have the right equipment and/or the right medicines. These factors must be addressed before we begin to talk about medical malpractice.” Problems with the lack of accountability in the judicial sector have also been given as reasons for not pursuing probable cases of medical malpractice.

## **Conclusion**

Governance of the health system in Benin remains problematic. Although fairly comprehensive laws, regulations and policies, and mechanisms for accountability and responsiveness have been

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<sup>16</sup> Ordonnance no. 73-38 of April 21, 1973. *Recueil des textes législatifs et réglementaires sous secteur pharmaceutique*. 2nd edition. April 2001.

<sup>17</sup> Law no. 97-020 of June 17, 1997. *Recueil des textes législatifs et réglementaires sous secteur pharmaceutique*. 2nd edition. April 2001.

<sup>18</sup> Ordonnance no. 73-38 of April 21, 1973. *Recueil des textes législatifs et réglementaires sous secteur pharmaceutique* 2nd edition. April 2001.

developed, their implementation and enforcement remain problematic. A summary of the strengths and weaknesses of the system follows.

### *Strengths*

- Comprehensive laws, regulations, policies, and strategic plans for managing the health system have been developed.
- External partners are actively involved, and other stakeholders, including private sector stakeholders, and the members of the community are engaged in the development of the relevant health policies and health plans.
- Mechanisms have been developed for community and other stakeholder engagement in the policy and budgetary planning process (COGECS, CS/ZS, Organe Paritaire).
- A functioning health management information system provides sufficient information to support the policy development process.

### *Weaknesses*

- Enforcement of the existing laws and regulations is weak and ineffective, primarily because there has been a lack of political will to enforce the regulations, but also because insufficient human and financial resources are dedicated to enforcement.
- The multiple laws, regulations, and policy documents that have been prepared are held at different sections of the MoH and by its partners. These documents are not readily available to all stakeholders.
- Other sources of information that could and should inform health policy and planning are not readily accessible. Funding and use of the documents center are insufficient, and a potential conflict exists between its mandate and the mandate of the new Directorate of Health Research. These challenges compromise the center's ability to act as a knowledge management center for the MoH.
- Currently, insufficient capacity exists at community-level management bodies, the COGECS and zonal health teams, for them to actively fulfill their planning and financial oversight role as expected.
- The media and the consumer rights associations do not play a proactive role in the development of health policies.

### *Opportunities*

Widespread expectation exists that the new president and the new cabinet will change the overall governance in the country and therefore influence the governance of the health system. This



situation creates an environment where interventions to improve the governance of the health care system may occur.

### *Threats*

The culture of patronage and disrespect of laws extends beyond the health sector, and should this culture remain unchanged, it will continue to be a problem for the governance of the health system.

## **Health Financing**

This section discusses Benin's current arrangements for collecting, pooling, and allocating resources for health; the strengths and weaknesses of those arrangements; and measures that are being undertaken to improve health financing. It presents additional health financing options to improve equity, access, service quality, and efficiency.

### **Analysis**

#### *Context for Health Financing*

The overall context for health financing in Benin is challenging. Benin's income level is low, its work force is employed mostly in the informal sector, adult illiteracy is high, and an estimated 1.5 million people are extremely poor (roughly 20 percent of the population). Those factors suggest that national revenue collection is likely to be severely constrained.

On the positive side, Benin has a participatory governance structure and a free press. The health sector has structures in place for civil society oversight of financial resource management. The government places a fairly high priority on the health sector, investing 8.34 percent of total public spending. This level is slightly below the Sub-Saharan African average level of 9.24 percent. The Ministry of Health has a mechanism in place to identify the poorest in the country and to subsidize their user fees through the recently established Indigent Fund. This is a positive factor in helping overcome financial barriers that keep the poorest in the country from obtaining health services they need. The MoH has a bottom-up programmatic budgetary process with active engagement of decentralized levels. The MoH's resource allocation processes are transparent and strategic.

The slight decline in the relative share that health constitutes in the overall government budget is worth exploring further to determine whether that decline indicates any degradation in the political importance of health over time (see Figure 5).

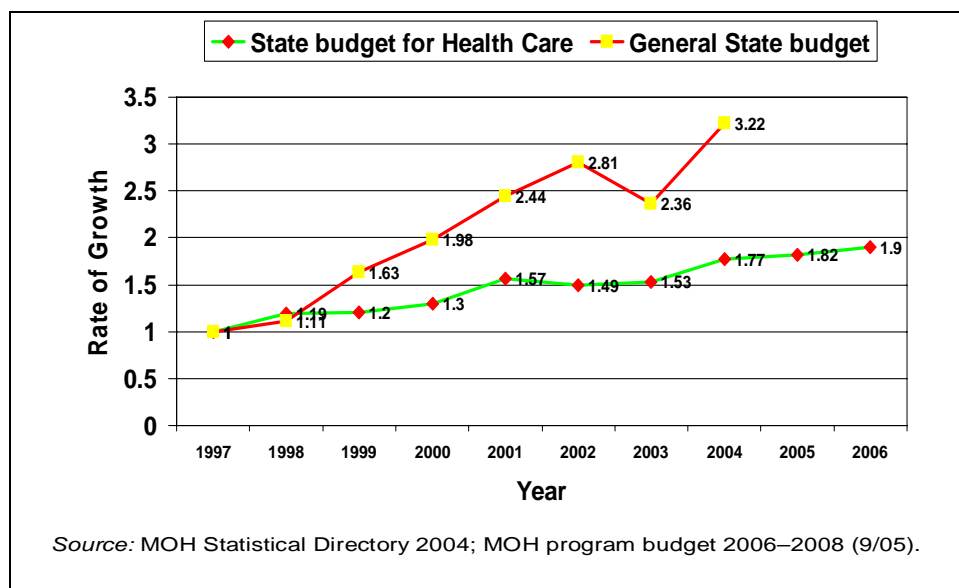


Figure 5. Evolution of the health budget in relation to the central government budget

### Critical Issues

People in the health sector in Benin are well aware of critical health financing issues they face. Very high out-of-pocket spending means that opportunities for risk pooling are limited. The poor underconsume needed services because they cannot afford to pay at the time of need. A surprisingly high share of total health spending on pharmaceuticals calls into question whether these medicine purchases make a commensurate contribution to public health. Ministry of Health resource allocation arrangements based on historical levels may not be the best way of channeling public funds to the most vulnerable populations and their most critical needs. MoH resource transfers that are not contractual and do not hold implementers accountable for specific results may not promote productivity or efficiency. Public expenditure management practices may result in problems in budget execution and inflated prices.

### Levels and Sources of Health Financing

At 4.6 percent of GDP, Benin spends slightly less than the average Sub-Saharan African country on health (5.24 percent). Total per capita health spending is USD 26 at current exchange rates and USD 43 at purchasing-power parity. Figure 6 shows the results of Benin's recent national health accounts exercise, which was carried out in early 2006 using 2003 data. Several points are noteworthy. Households are by far the largest source of health spending in Benin. Private out-of-pocket spending makes up 51.2 percent of total spending and nearly 99 percent of all private spending. The government (at 31 percent) and donors (at 16.5 percent) follow households as a source of health funds. The two largest providers of health services are pharmacies and public health centers. External sources of funds retain direct spending control of a large share of their contributions. Public hospitals have very diverse funding streams, receiving funds from all financing agents.

## Benin Health Financing (2003 FCFA based on 3/2006 Provisional NHA Report)

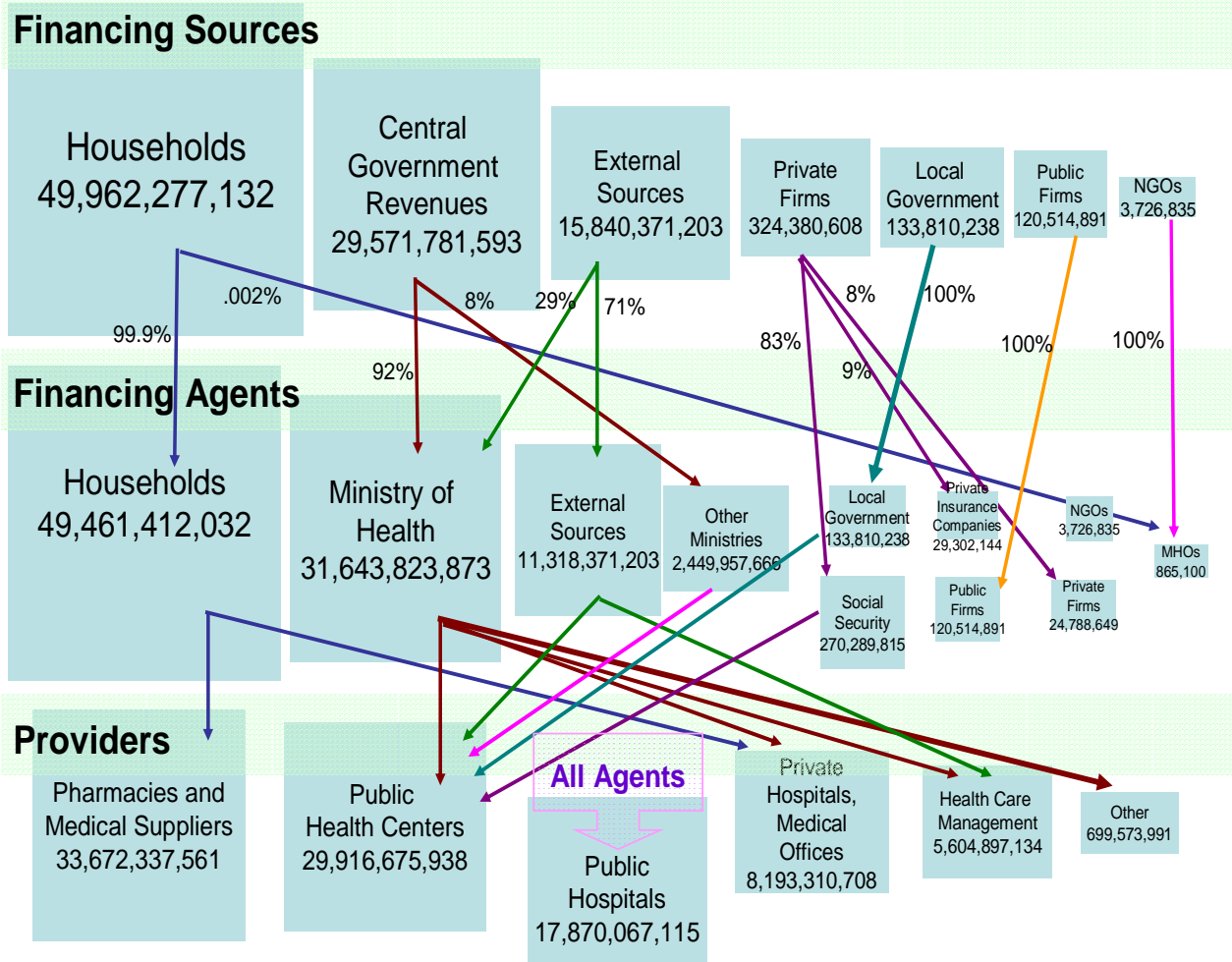


Figure 6. Benin health financing: flow of funds from sources to providers

Benin is far above regional averages for out-of-pocket spending, but it is not the only country facing this challenge (Figure 7). Although high out-of-pocket spending may show the high priority that society assigns to health, it is problematic for several reasons. First, this spending is largely outside the influence of public policy making and thus does not necessarily buy goods and services with high health impact. Second, the poor and others with limited cash reserves are likely to underconsume health care when they cannot afford to pay at the time of need.

### Uses of Health Financing

A review of household spending on health shows that most of it is not channeled through the public health sector but rather to pharmacies for the direct purchase of medicines. In a multicountry comparison across several regions, Benin spends a higher share of its total health resources on pharmaceuticals than any other country except Ethiopia (Figure 8

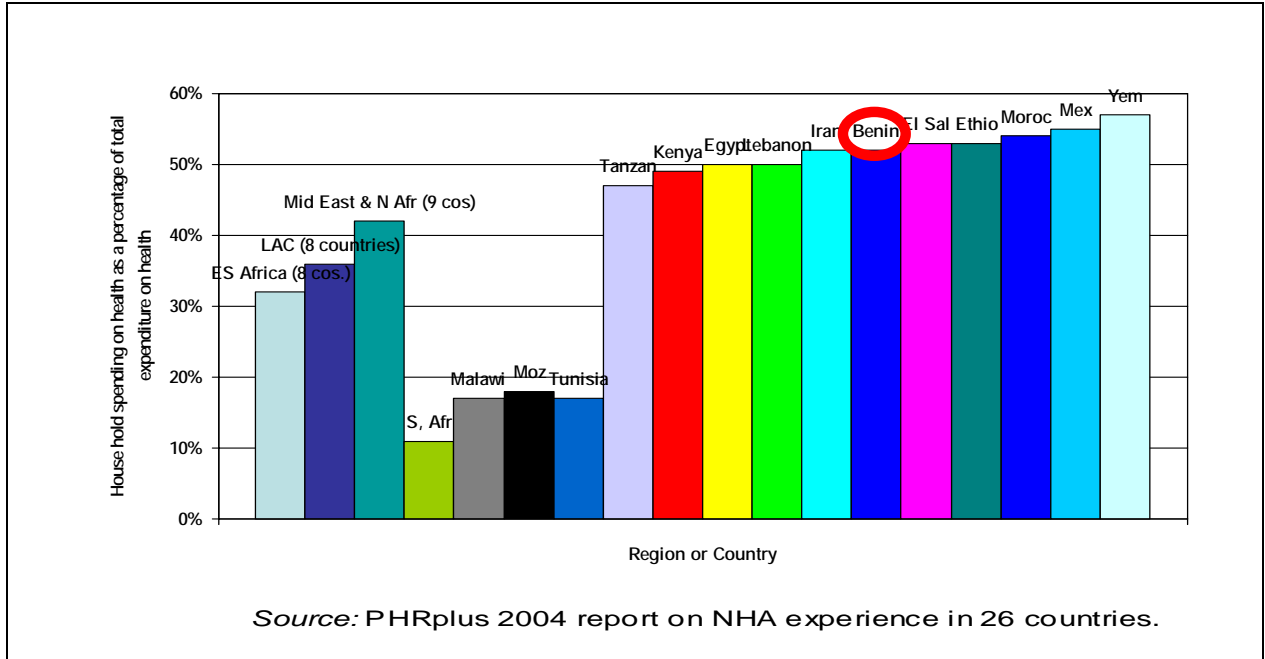


Figure 7. Direct household spending on health in a global context

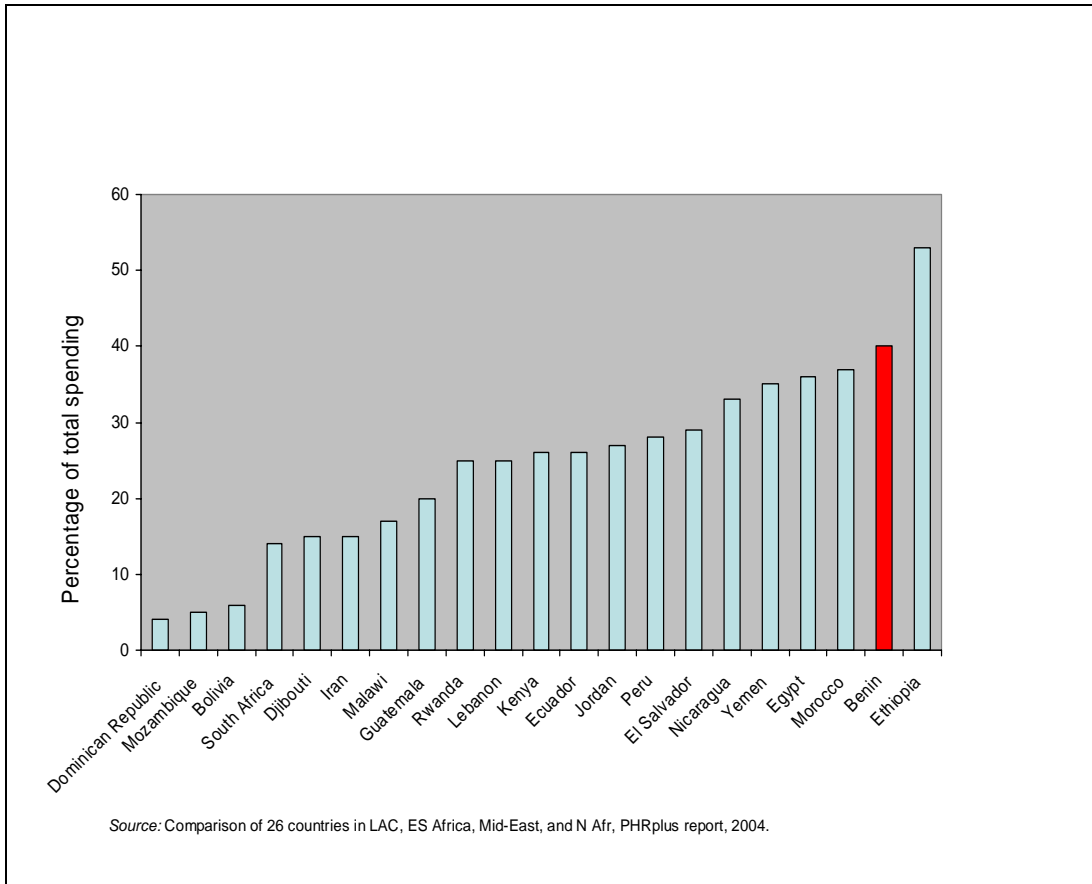


Figure 8. Pharmaceutical spending in relation to total health spending

This finding is surprising on a couple of fronts. First, this estimate for Benin's pharmaceutical spending does not separate out MoH spending for medicines from the autonomous public sector pharmaceutical procurement agency (Centrale d'achat des médicaments essentiels et consommables médicaux; CAME). Second, because in Benin unit prices of medicines are regulated and kept below normal market prices, Benin would be expected to spend less than average for the same volume of medicines. This factor suggests that even with low prices, Benin spends a higher share of total spending on medicines than other countries do. Because pharmacies are concentrated in urban areas, this finding also suggests that a high share of Benin's health resources is spent in urban areas.

As mentioned earlier, external donor resources make up 16.5 percent of total health spending. Yet only 29 percent of donor funds (or 4.7 percent of total health spending) are channeled through the Ministry of Health. This finding means that 71 percent of donor spending (nearly 12 percent of total spending) is outside the direct control of the MoH. Donors invest the majority of their health funds on behalf of Benin (for example, through bilateral projects or donations to specific health institutions). When the health spending controlled by households and that controlled by external donors are considered, 64 percent of health spending is outside the direct control of public policy making. This finding suggests that even the best efforts by the MoH to use its public health funds well must be complemented by measures to influence household and donor spending so that those align with national health priorities and achieve high health impact.

#### *Ministry of Health Resource Allocation*

The Ministry of Health's system for allocating government funds has a number of important strengths. The process is participatory, program based, and built from the bottom up through the ministry's consolidation of the budgets of individual operating units. Early each year (for example, April 2005 for the 2006 calendar year), the MoH's DPP sends out a letter of instruction to each of the MoH's operating units, from its directorates to individual decentralized health zones. This letter provides the overall budgetary planning envelope for each operating unit (based on the prior year's level) and discusses the ministry's programmatic priorities for resource allocation. These priorities are the ministry's five core programs based on the National Health Policy and Strategy 2002–2006: (1) reorganizing the base of the health pyramid and reinforcing health coverage; (2) financing and improving resource management; (3) preventing disease and combating diseases, and improving the quality of care; (4) preventing and combating priority illnesses (HIV/AIDS, malaria, tuberculosis); and (5) promoting family health.

Individual operating units then develop their proposed budgets, and the DPP consolidates those budgets into the overall health sector program budget. This consolidated budget is discussed with development partners, and the proposal is finalized through an iterative process. The national budget is submitted to the National Assembly by the government during the first week of October at the latest and adopted by the National Assembly on December 31 at the latest.

In addition to the program budget, the ministry maintains the same budget information by line item so that the MoH can present its budget either by programs or by budget line items. The ministry's system for tracking budget execution is impressive and provides real-time information on expenditures.

Even with its many impressive features, the ministry's resource allocation system could be strengthened in several ways. First, the individual budget envelopes that operating units receive are not explicitly adjusted for considerations such as disease burden, poverty, geographic dispersion of the population, or the capacity of local government to raise revenues. Although overall equity of the resource allocation system appears to be quite good, a system that would allocate resources based on an index of such considerations could enable the MoH to strengthen equity further and target resources to where they are most needed. A number of other countries have introduced measures to do so, including South Africa, Mexico, and Peru. Benin might profit from exploring those country's experiences for possible lessons.

A second improvement the ministry might make would be to develop contractual bases for its resource transfers to operating units. Thus, in exchange for a given level of budgetary resources, each operating unit would agree to deliver a defined set of results. The MoH would then focus its budget execution oversight more on the achievement of those results than on the specific expenses incurred. Benin could draw on a number of interesting experiences with this strategy, where other countries' ministries of health use performance contracts to transfer resources to decentralized units. The Center for Global Development has a working group under way now to study country experiences with pay-for-performance in health and will soon issue a report of lessons learned.

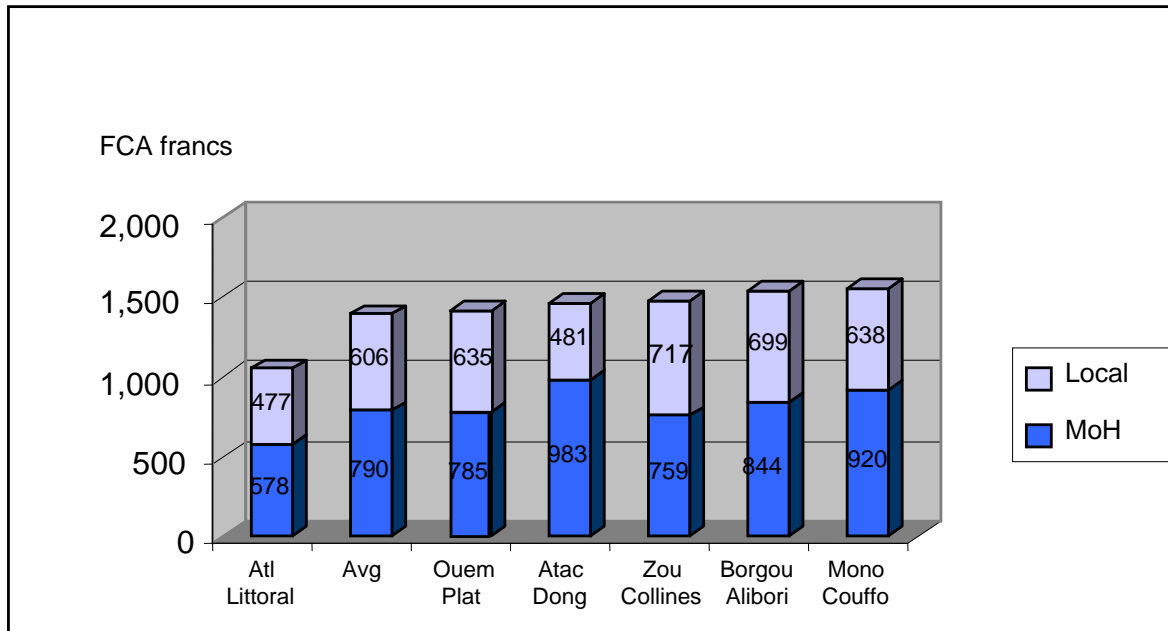
A third improvement that would help the MoH manage its budget would be more complete information on the allocation of donor resources. Because donor resources for general budget support go directly through the Ministry of Finance and other donor funds are channeled directly to projects or health facilities, the MoH has difficulty monitoring the level, allocation, and expenditure of these funds. Improvements in budget information for donor health spending would require a high degree of collaboration and transparency on the part of the partners.

### *Ministry of Health User Fees*

Ministry of Health facilities charge direct fees at the time of service for consultations, procedures, and medicines. These fees are kept at the facility level. The facility staff members work together with the community committees to allocate user fees according to rules that are set by the MoH. Community financing represents a substantial share of local operating costs for MoH facilities. On average, local contributions represent 43 percent of total operating costs (Figure 9). As previously noted, MoH funding appears to complement local contributions effectively so that overall spending by department is relatively uniform, with the highest per capita MoH spending (outside the capital city area) in Atacora Donga, the department with the lowest local revenues. Because service use is low, however, the Ministry of Health might consider lifting user fees from some critical services, which could remove the financial barrier for those who might otherwise seek care.

This strategy seems worth considering for high-priority services, such as deliveries and maternal and child health services, which are not major sources of revenues anyway (see Figure 10 and where it would be desirable to increase use. Such an exemption policy might be applied only in areas of concentrated poverty or everywhere. Bolivia and Peru, for example, have increased assisted deliveries and child health services by undertaking such measures. Further analysis

would be required to determine the likely effect of such a change on use and financial sustainability.



Source: Based on Benin MoH. 2005. *Annuaire des statistiques sanitaires 2004*.

Figure 9. MoH per capita spending, 2004

	Revenues
Drugs and consumables	71%
Laboratory+ Radiology	7%
Outpatient consultations	4%
<b>Deliveries</b>	<b>4%</b>
Other receipts, financial contributions	4%
Hospitalizations	3%
Documents	2%
Surgery	2%
Other services	2%
<b>Maternal child health</b>	<b>1%</b>
	100%

Source: Benin MoH. 2005. *Annuaire des statistiques sanitaires 2004*.

Figure 10. Community financing revenues, 2004

### *Financing Care for the Indigent*

Benin estimates that 1.5 million of its residents are extremely poor. For these people, even modest user fee requirements at the time of service can pose a barrier to seeking needed care on a timely basis. In recognition of this fact, Benin recently developed an Indigent Fund, which public facilities can draw on to care for people who are unable to pay. This fund is an important step toward reducing financing constraints as a barrier to use. Yet more could be done to strengthen the effectiveness of this Indigent Fund.

As the fund currently operates, individuals whose fees would be covered must get certification of indigence from the community, which is usually done initially by the COGECS, then certified by a social worker and signed by the mayor's office. With these verifications, public facilities can provide services at no cost and ask the Treasury Department to reimburse them for care provided to people who meet the Indigent Fund requirements. However, the Indigent Fund does not carry out public awareness or outreach activities; so people generally do not realize they are entitled to seek care free of charge. Also, the fund does not reimburse private providers, even when they care for the indigent. Rather, public hospitals appear to be the driving force behind categorizing patients as indigent, usually after providing care and failing to collect fees. Thus, the Indigent Fund as currently applied serves more as a cushion for hospitals against bad debts than as a way of encouraging the extremely poor to use health services as and when needed.

Several ideas are circulating for enhancing the effectiveness of this solution, including channeling funds for health care for the extremely poor through community health insurance schemes. This idea is worth exploring where such insurance schemes operate. Increasing public awareness would also be helpful, so that the people who need this help learn about it before a health crisis. The MoH might consider allowing funds to flow to any authorized provider of care to the extremely poor, including private as well as public facilities. The current stigmatizing nomenclature of the Indigent Fund has been suggested as another barrier to access. In any redesign of a mechanism for removing the financial barriers to care faced by the extremely poor, this factor should be considered and may call for renaming the mechanism to encourage greater acceptability.

### *Ministry of Health Purchasing and Budget Execution*

Ministry of Health budget execution is generally quite good. Funds that the ministry transfers to departments are executed at 100 percent of authorized levels. Even central ministry departments execute over 90 percent of their authorized levels. The MoH has effective internal procedures for purchasing. The Ministry of Finance delegates a staff member to the central MoH and each prefecture. These delegates help prepare procurement documents and certify reception of all goods procured. This direct interaction between the Ministry of Health and the Ministry of Finance helps avoid mistakes and shorten procurement processes.

The major challenge with purchasing is not within the ministry and its operating units but rather at the level of the Public Treasury. All MoH invoices are paid directly by the Treasury. In principle, this structure could facilitate greater transparency in government procurement. However, the Treasury is extremely late in paying suppliers. This delay leads many suppliers to



avoid selling to the MoH. Those who are willing to supply the MoH factor in large adjustments for financing charges and uncertainty, thereby increasing the costs of procurement. Also, the MoH does not have access to a price list to even determine whether prices offered are competitive. When individual members of staff are not personally familiar with market conditions for a particular type of item, they have no information for assessing prices.

Another challenge to effective budget execution is the practice of allocating budgeted resources equally by quarter. Thus, the MoH operating units are limited to spending at one-fourth of their annual authorized level in each three-month period, regardless of how their resource needs fluctuate over the course of the year.

### *Prepayment and Insurance*

Three broad types of insurance coverage are in place in Benin. Formal sector workers and their families are covered by the Beninese Social Security Fund. This fund provides partial payment of health care costs and requires co-payments that vary by type of good or service (medicine, consultation, and so forth). Private firms often seek additional health insurance coverage for their employees through private commercial firms. A number of private insurance firms operate in Benin, and the market appears to offer comprehensive packages and to compete on the basis of price and quality for market share. The third type of prepayment in Benin is community-based health insurance. A small but growing number of such schemes have formed over the past decade and are gaining in popularity among communities and donors. Although only a relatively small share of Benin's population is covered by one of these three types of insurance, growing awareness exists that such arrangements are superior to direct out-of-pocket spending as a way to finance health care. There is also recognition that such insurance schemes hold potential as a means of channeling health subsidies for the extremely poor. (Please see the section on Private Sector Engagement for more discussion on insurance.)

### *Provider Payment Arrangements*

In the public sector, health care providers are paid on a salary basis. In the private sector, they are paid on a fee-for-service basis. Insurance companies reimburse providers on a fee-for-service basis as well.

## **Conclusions**

### *Strengths*

- Benin's user fee system allows for retention of user fees at the service delivery level.
- The MoH Indigent Fund provides a way to cover the costs of caring for the extremely poor.
- Benin has experience with risk pooling and prepayment, both through the private commercial insurance sector and through mutual health organizations.

- The MoH carries out bottom-up, program-based budgeting. Operating units prepare budgets, and the MoH central unit consolidates them.

### *Weaknesses*

- High out-of-pocket spending in the form of user fees and medicine purchases likely poses a financial constraint to access for the poor and does not allow for risk pooling.
- The high share of household spending on pharmaceutical products and other medical supplies is not necessarily spent on the most vulnerable or the most important health problems.
- Government funding of health care is not keeping pace with other countries and other sectors.
- The MoH does not transfer resources to its operating units on the basis of performance contracts.
- Health insurance coverage is incipient and insurers face difficulties achieving financial sustainability.
- Private religious service providers treat indigent patients, especially for emergency services such as caesarean deliveries. They cannot recoup the cost of these services from the MoH Indigent Fund. Over time, this unpaid subsidy may lead such providers to avoid serving the poor, it may reduce the quality of service overall as they shortchange operating expenses or forgo investments to finance indigent care, or it may reduce the financial accessibility of services to others if the providers are forced to raise prices.

### *Opportunities*

- People are optimistic and excited about the possibilities for improvement under this new government. This popular openness to change and broad support allows the government to undertake bold measures that would not be possible at other times.
- A wide variety of actors recognizes that financial constraints keep people from accessing priority health services and thinks that broad access to mutual health insurance could help address this problem.
- GAVI is launching a new line of support for health system strengthening and seeking partner countries with existing program budgeting approaches and plans for strengthening their health systems. Benin has all the conditions in place to partner with GAVI.

### *Threats*

Even with the impressive organization and controls of the MoH budgeting and financial management, the perception that the system is vulnerable to abuse is common.

## Health Service Delivery

The way in which health services are organized and managed has a significant effect on how well they serve the needs of the population. Health care delivery systems include both public and private sector providers, who are in turn are influenced by levels of decentralization, payment relationships, and the like. Service delivery can be defined as the way that inputs are combined to allow the delivery of a series of interventions or health actions, and service delivery is the chief function that the health system needs to perform (WHO *World Health Report* 2000). The service delivery system is the system element where the forces of supply and demand for health care meet. It is the point at which all the resources and norms come together to be transformed into curative, preventive, promotive, and rehabilitative services.

As described in Section 2, the Benin health system is based on a pyramid, with the Health Zone at the base. According to a 2005 evaluation, all 34 health zones are operational in that they have a functional Health Committee and Health Zone Management team installed.

Table 5 presents the organization and management of the health zone, and “coverage” of the various health service structures (as a measure of the number of administrative units with those types of health facility).

**Table 5. Organization, Management, and Availability of Structures at the Base Level of Benin’s Health Pyramid**

Level	Number at Level	Population Served	Decision-Making Body	Technical Body	Health Facility	Coverage with Facilities
Village	3,747		Village health committee		Village health unit	15% <sup>a</sup>
Arrondissement	546	10,000–15,000	COGECS		Health centers <sup>b</sup>	86% <sup>c</sup>
Commune	77	50,000–60,000				
Health Zone	34	100,000–200,000	CS/ZC <sup>d</sup>	EEZS	Zonal Hospital	70% <sup>c</sup> 0.32 HZ beds/inhabitant <sup>c</sup>

<sup>a</sup> Demographic and Health Survey 2001.

<sup>b</sup> CSC, CSA, CASES, isolated maternities and dispensaries.

<sup>c</sup> *Annuaire des Statistiques Sanitaires 2004*: includes some faith-based facilities when designated as CSA, CSC, or HZ.

<sup>d</sup> Subcommittee acts as hospital board.

## Analysis of Health Service Delivery

Nationwide data were available to make judgments on the various aspects of the service delivery system in only a very few cases. With the exception of data available through the SNIGS (2004) or in the 2001 Demographic and Health Survey (DHS), the following discussion is based on various reports and studies conducted in limited geographical areas, on interviews, or on the limited site visits made. Several references are made to accomplishments in the Borgou/Alibori department because of the availability of monitoring and evaluation information on a wide variety of indicators over a seven-year period (PROSAF Final Report; PROSAF II Final Report).

### Availability of Service Delivery

Even with the figures presented in Table 5, the availability of health services is difficult to judge accurately for a number of reasons. First, the number of private health facilities is just now being inventoried. The majority of private facilities are in the Littoral (Cotonou) and Ouémé (Porto-Novo), and a significant number of private providers are not officially authorized to operate a private facility (see section on Private Sector Engagement for more details). Second, availability depends on more than simple infrastructure.

An analysis of overall hospital bed capacity in Benin (public and faith-based) indicates an average of 0.55 hospital beds per 1,000 population. Although this level is lower than the WHO norm of 1 bed per 1,000 population, sizable unused capacity remains: bed occupancy rates range from 30 percent at CSCs, 39 percent at CHDs, 53 percent at public HZs, 65 percent at the CNHU, to 81 percent at the faith-based hospitals. The CNHU represents 15 percent of national hospital capacity, 29 percent is at CHDs, and the remaining capacity is evenly split between state and faith-based zonal hospitals (both at 28 percent). However, because of higher occupancy rates at faith-based hospitals, they represent 36 percent of hospitalizations, compared with 21 percent in state zonal hospitals. In terms of functional zonal hospitals, which are supposed to serve as the first referral level, only 67 percent of health zones have a designated zonal hospital, and only 47 percent have an obstetrician-gynecologist, 52 percent a surgeon, and 23 percent a pediatrician.<sup>19</sup>

With the exception of certain specialties, the impression from general human resources numbers is of a general “adequacy” of personnel (see Human Resources section for more details

**Table 6. Range of Health Personnel per Capita**

Personnel Category	Lowest	Highest
Physicians	2,325 Atlantique/Littoral	22,160 Borgou/Alibori
Nurses	1,700 Ouème/Plateau	4,000 Atacora/Donga
Midwives	1,125 Atlantique/Littoral	2,700 Atacora/Donga
Laboratory technicians	8,800 Atlantique/Littoral	34,000 Atacora/Donga

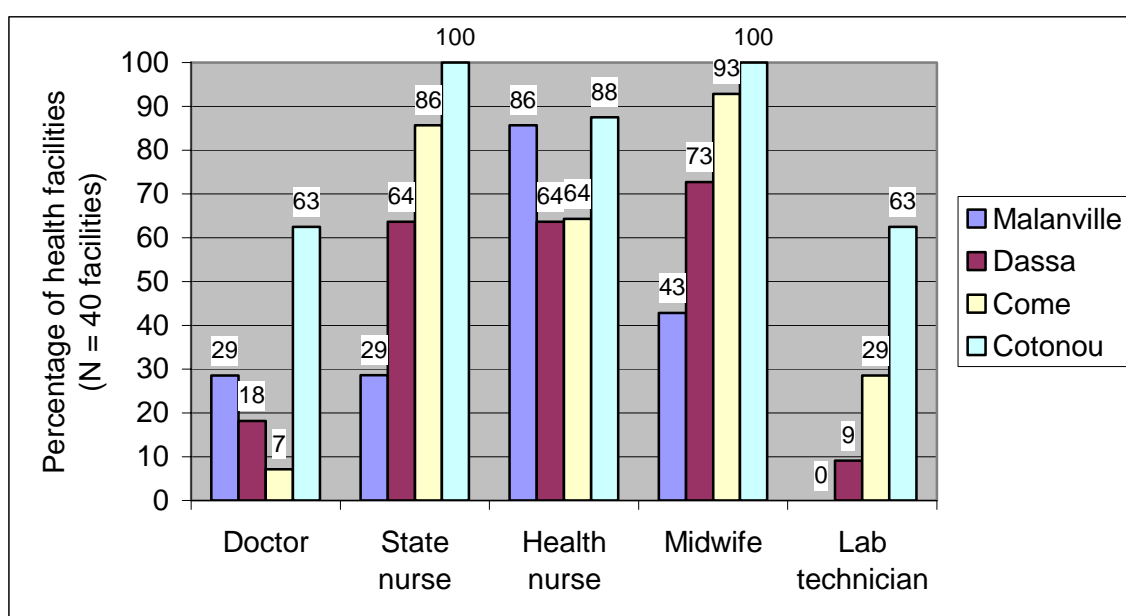
Source: Benin MOH. 2005. *Annuaire des statistiques sanitaires 2004*.

on human resources management). However, the distribution between the public and private sectors and between urban and rural areas indicates that human resources are often not available where they are needed. Overall, 56 percent of physicians work in the private sector. The number reported in the *Annuaire des Statistiques sanitaires* for nurses, midwives, and laboratory technicians

<sup>19</sup> Ministère de la Santé Publique. 2005. *Annuaire des statistiques sanitaires 2004*. République du Bénin.

working in the private sector appears much lower (15 percent, 17 percent, and 12 percent respectively). Table 6 shows the range of human resources per capita for several categories of health personnel.

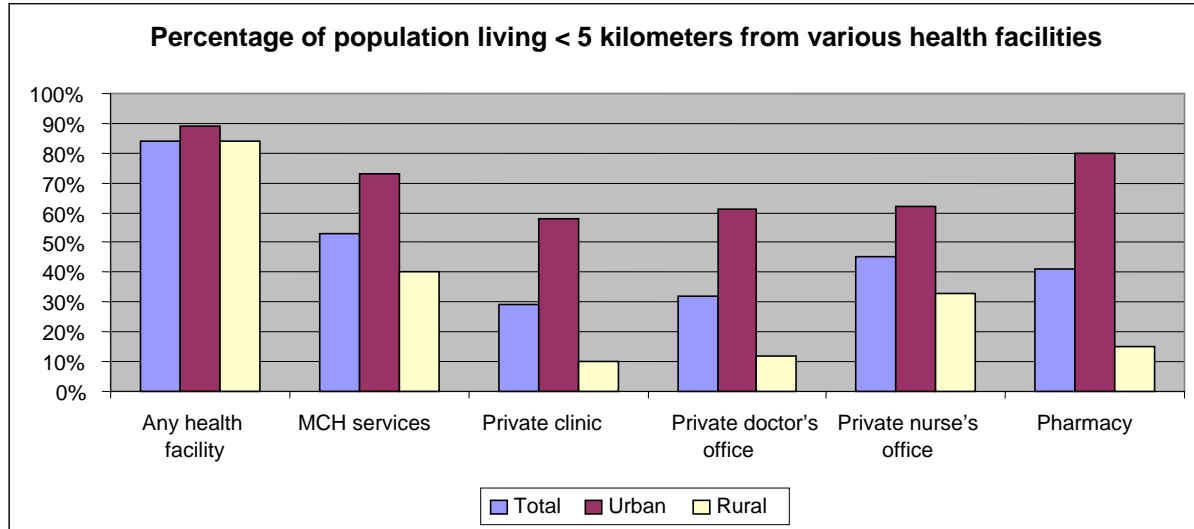
Preliminary results from a facility survey conducted in late 2005 in four health zones (30 CSAs and 10 CSCs) throughout the country<sup>20</sup> indicate that 85 percent of facilities had electricity, 90 percent had water, and 87 percent had sanitary facilities. However, only 37 percent had any source of communication (telephone or radio network), ranging from no facility having communication mechanisms in the HZ in the north, to 75 percent of facilities in Cotonou. Figure 11 presents availability of various types of personnel from this study and indicates a great inequity in access, particularly for physicians, midwives, and laboratory technicians.



**Figure 11. Percentage of facilities having qualified personnel: study of four health zones in Benin**

While Figure 11 indicates staff availability, Figure 12 examines accessibility to services (DHS 2001). The percentage of the population with access to curative services (mainly public sector) is 84 percent overall and generally equitable; this finding corresponds with the MoH's measure of health system coverage (number of arrondissements with either a CSA or CSC) at 86 percent (see Table 5). However, access to maternal and child health (MCH) care, pharmacies, and private providers is not equitable, with significantly lower access for rural populations. Moreover, the geographic data presented in Figure 12 do not include any assessment of availability and affordability of transportation.

<sup>20</sup> The study took place in Malanville/Karimama, Dassa-Zoumè/Glazoué, Comè/Grand Popo/Houéyogbé, and Cotonou. All public sector CSAs and CSCs in those zones were included in the study. This study was conducted under the auspices of the study on the System-Wide Effects of the Global Fund, funded by USAID through the Partners for Health Reform plus (PHRplus) Project.



Source: DHS 2001.

Figure 12. Geographic access to health services in Benin

### Use and Coverage

#### Barriers to Care

The availability and geographic access of health services are key determinants of whether the population takes advantage of the “supply” that the health system provides. If these geographic barriers are removed, however, it is not clear that the population will use the services offered. In fact, even with current geographic access for curative services, use remains low.

Several possible sources of information for understanding barriers to care were examined. Data from a qualitative study in the north of Benin<sup>21</sup> indicate that resources for health services do not come from pooled household resources, such as underlie investments in housing and agriculture, and thus ill persons rely on whatever resources they can individually pull together at the time. The study found that physical distance was not the major barrier to care, but cost, mode of payment, and perceived quality of the care provided (medicines, lab services, client/provider relationship, and availability of skilled staff) were key factors in decisions to seek care. These results mirror what stakeholders at all levels of the system mentioned in interviews as barriers: “*accueil, pauvreté, rançonnement*”—provider/patient interactions, poverty, and under the table payments. Also mentioned was a preference for traditional medicine. Data from the 2001 DHS revealed the following as primary reasons (list of three possible reasons) for not seeking care: medicines too expensive (42 percent), health facility too far (42 percent), no facility (30 percent), lack of health personnel (25 percent), lack of equipment (24 percent), consultation fees too expensive (16 percent), bad provider/client interaction (12 percent), and lack of medicines (10 percent).

<sup>21</sup> P. Ngom, S. Wawire, T. Gandaho, et al. 2000. Inter-household Decision Making on Health and Resource Allocation in Borgou, Benin. *Frontiers* (November).

## Use of Curative Services

Data from the *Annuaire Statistique* for 2004 indicate continuing low use of outpatient services—number of visits per year averaged 0.39 among the facilities reporting<sup>22</sup> (ranging from 0.27 in Couffo to 0.62 in the Littoral). Table 7 shows these and other use/coverage rates. These figures have remained fairly stable since about 1995, with the exception of consultations for children under one year of age, which have increased in the last 15 years from 0.4 to about 1.6 consultations per child per year, and to a lesser extent consultations for children one to four years of age, which rose from 0.2 to about 0.5.

## Use of Reproductive Health and Child Health Services

Use of prenatal care—measured as the number of prenatal consultations given averaged over the number of pregnant women—was 92 percent, ranging from 66 percent in the Atacora to 179 percent in the Littoral (*Annuaire des Statistiques Sanitaires 2004*). The percentage of women having an assisted delivery was 76 percent, with a range from 47 percent in the Atacora to 91 percent in the Littoral. DHS data indicated 87 percent of women had at least one prenatal visit, with little difference between urban and rural women, but 71 percent of women in urban areas made four prenatal visits compared to 57 percent in rural areas. Although the overall percentage of women delivering in a modern facility was 72 percent, this figure ranged from 98 percent in Cotonou to 54 percent in the Atacora (DHS 2001). Contraceptive prevalence in 2004 (*Annuaire des Statistiques sanitaires*) was 16.4 percent, ranging from 1 percent in Plateau to 23 percent in the Zou. Coverage with diphtheria, pertussis, and tetanus vaccine (DPT3) was 87 percent, ranging from 68 percent in Plateau to 103 percent in Couffo. Data from the DHS health facility survey showed DPT3 coverage ranging from 56 percent to 88 percent. These results are summarized in Table 7.

**Table 7. Coverage Rates from Various Sources**

Type of Care	DHS 2001	<i>Annuaire des Statistiques Sanitaires 2004</i>	Evaluation of 34 Health Zones (1st trimester 2005)
Use of curative services (number of visits)	No data available	0.39	0.09–0.93
Childhood vaccinations	73% DPT3 (range: 56–88%) 59% all vaccines (range: 49–68%)	DPT3 87% (range: 68–103%)	Effect coverage 26–85%
Prenatal care	87% at least 1 visit 4+ visits: 57% (rural); 71% (urban)	92% at least 1 visit (range: 66–179% at least 1 visit)	4+ visits: 4–69%
Assisted deliveries	72% (range: 54–98%)	76% (range: 47–75%)	15–75%
Contraceptive prevalence	18.6% (range: 5–28%)	16.4% (range: 1–23%)	0.25–25%

<sup>22</sup> This use rate includes all public and some private (mostly faith-based) facilities that contributed in 2004 to SNIGS. It does not include most private facilities.

## Specific Priority Diseases

Three diseases have obtained a particular focus in Benin, caused in part by the significant funding available to combat them: HIV/AIDS, tuberculosis, and malaria.

The tuberculosis detection rate was reported as 82 percent.<sup>23</sup> The treatment success (cure) rate was 81 percent in 2004 and has been fairly stable at that rate since 1999 (*Annuaire Statistique 2004*). In 2004, 3,304 persons were identified as having tuberculosis, with an incidence rate (new cases) of 4.6/10,000 inhabitants.

The prevalence of HIV/AIDS is currently measured at 2 percent nationally. A system of treatment, prevention of maternal-to-child transmission, testing and counseling, and prevention has been established within 40 sites throughout the country. As of 2005, 4,298 patients are under treatment with antiretrovirals (of an estimated 13,190 people needing antiretroviral treatment).

Malaria is the major cause of consultation and hospitalizations in Benin. A 2003 Roll Back Malaria midterm evaluation found that 35 percent of pregnant women slept under an insecticide-treated net, 37 percent of children under five slept under an insecticide-treated net, and 52 percent of pregnant women received prophylaxis against malaria during their pregnancy according to national policy.

## *Organization of Service Delivery*

Organization of service delivery has been defined by WHO as the choice of appropriate level for delivering interventions and the degree of integration. Benin's health system pyramid seeks to provide care at the lowest level feasible, starting with services at village level. Care at all levels in the public system requires payment of a consultation fee and payment for medicines at the time of service. Engagement of private providers in the network of facilities operating within a health zone is current being strengthened (see Private Sector Engagement section).

## Integration

In theory, an array of primary health care services is to be provided by the CSA level, including basic curative and MCH services on a daily basis. Data from interviews indicate that most facilities tried to provide services on all days. Data from the 2005 health facility survey in four zones indicated that all facilities provided access to curative services 24 hours a day and that for most, but not all health zones, vaccinations and nutritional services were available five days a week.

The EPI/PHC strategy implemented in the 1990s also focused on an integrated package of services. Building on those foundations, significant work has been carried out in Borgou/Alibori over the last seven years to create an integrated service delivery approach for a minimum package of services (family health protocols). Over this period the number of facilities in Borgou/Alibori offering all services every day and taking advantage of encounters to provide all

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<sup>23</sup> World Health Organization. 2006. *Global Tuberculosis Control: Surveillance, Planning, Financing*. Geneva: WHO.



needed care rose from 50 percent to 94 percent of private and public health centers. No data were available to indicate that these high rates would be valid for other areas of Benin.

### Continuity of Care

A major concern and focus of attention in Benin has been on creating a *system* of referral and counter-referral between various levels of the health system. In fact, the concept of the health zone was designed to address this gap, by creating a functional first-level referral hospital at the health zone level. In theory, all health centers should be linked with the HZ via a radio network (*réseau aérien de communication*, or RAC), and the health zone should have a number of functioning ambulances that can fetch the referral cases they are notified about and bring them to the hospital.

In addition, an information system has been developed in which the patient brings a referral form to the higher-level facility, which in turn returns a copy to the referring facility with updated information on the patient. In reality, the counter-referral component of the information system did not function in any of the sites visited, and the communication and transportation components still require significant strengthening. Based on a 2005 evaluation of all 34 health zones, 30 have ambulances, but only 7 of those vehicles (21 percent) are in good condition. Only 13 (38 percent) health zones have a functioning RAC system. Evidence in some zones indicated a real effort to work with what was available: one zone visited, which had no RAC, used one old ambulance based in a centrally located CSC (not at the referral hospital) and provided phone cards to those at the CSAs so they could call the ambulance directly. The costs of this system were covered by the community financing system revenues so that patients did not have to pay. In other zones visited, patients were still required to find and pay for their own transportation. In the north of Benin, community management committees have negotiated with transporters to reduce the cost of transportation of women in labor from villages to the health centers.

### Quality Assurance

Quality assurance consists of three key components: defining quality, measuring quality, and improving quality. Benin has made significant progress in defining quality of care through the development of norms, standards, and protocols for most of the major health problems in Benin. Norms and protocols currently exist for nursing and midwifery actions, family health (including reproductive health, maternal health, child health, essential obstetrical care and emergency obstetrical care, integrated management of the ill child, malaria, diarrhea, ARIs, HIV/AIDS prevention and treatment, and tuberculosis). Many of these protocols were available at health facilities that were visited.

Measurement of quality, through supervision and monitoring, is less obvious. What formal data exist on the quality of care (compliance with norms) indicate that many shortfalls remain. The quality of supervision by health zone teams is most probably uneven throughout the country, although most of the health zones visited appeared to have conducted quarterly visits to all health facilities in 2005 and the 2005 health zone evaluation showed that all health zones had conducted supervision visits (although not all quarterly). Some had a supervision checklist that included quality items. Some informal attempts appeared to be made to conduct exit interviews with

patients to better understand issues of patient satisfaction, but no formal or standardized method was detected. In Borgou/Alibori, Zou/Collines, and perhaps a few other isolated sites, specific efforts have been implemented to monitor quality through structured training supervision. Results from Borgou/Alibori indicate that EEZSs improved their training supervision scores from an average of 5 percent in 2000 to 88 percent in 2005.

Structured methods of quality improvement that have been tested in some limited geographical areas have yielded some interesting experiences. These include improvement collaboratives, which have been instituted in Borgou/Alibori, Zou/Collines, and some health facilities in Cotonou. These collaboratives seek to improve management of specific health conditions by bringing together staff members from many sites to learn from each other how to define, measure, and improve performance through process redesign. Initial results of improvements in quality from these collaboratives are promising.

At the national level, some reflection on how to ensure quality and how to ensure quality assurance has already taken place. A National Quality Committee has recently been established but is not yet operational.

### ***Key Conclusions for Health Service Delivery***

The general service delivery system design in Benin appears to be conceptually well structured, with its peripheral care organized within a health zone and managed by those with public health training. Overall, physical access (as measured by distance) to health care infrastructure is relatively good and equitable. However, the availability of adequate resources (human and otherwise) within those structures for curative and MCH services is very uneven throughout the country: many facilities lack staff and equipment to provide priority services such as maternal and child health. Although the private sector provides a significant amount of the care, geographic access to private facilities is still limited for most of the population. Many barriers remain for the population to effectively use care: distance to facilities that have personnel and medicines available, financial access, and poor provider/patient interactions. Poor interactions among providers and communities also reflect inadequate attention to how health care services are organized and delivered at health facility level so that they are more in line with clients' needs and expectations. The effect of health service delivery on health outcomes remains inadequate, with both maternal and child mortality, although not really out of line for West Africa, not showing any significant improvement over the last 10–15 years.

Following are current strengths and weaknesses of the health delivery system. Many of the strengths have an associated weakness and vice versa.

#### ***Strengths***

- *Strong concept of “public health”*: The comprehension of the concept of public health appears to be well assimilated at national, departmental, and zonal levels. There is an understanding about how to address the problems of a population that needs a range of preventive, curative, and promotive public health services, rather than a focus on the medical needs of the single patient.

- *Decent physical access to health infrastructure:* The coverage of health infrastructure and overall geographic access to a health facility is quite high and, as measured by living within 5 kilometers, is relatively equitably distributed throughout the country.
- *Definition of the technical contents of care:* Norms and protocols exist for the major causes of morbidity and mortality and for the basic package of services. These norms and protocols define quality care. They have generally been distributed to the peripheral levels of the health care system.
- *Coverage with some priority health services:* Use of assisted deliveries, prenatal care, and childhood vaccinations is fairly high, although coverage levels are not evenly distributed throughout the country.
- *Efforts in place to create continuity of care through referral systems:* Referral systems have been defined, and some health zones have been creative in trying to meet these norms within the very limited resources they have.
- *Some very positive experiences (although geographically limited) in quality assurance upon which to build:* Quality assurance capacity has been built in several departments that have applied a range of structured quality assurance methods. A growing effort has been made at national level to consolidate. Several interesting experiences in applying structured quality assurance methods focused on quality of care delivered, and a National Committee on Quality exists.

### Weaknesses

- *Coverage with infrastructure does not equal adequate quality of inputs:* Although coverage is 86 percent, not all the infrastructure is in a good state of repair, many facilities are not adequately staffed, and not all have the minimum functioning equipment. In reality, access to care is neither sufficient nor equitably distributed.
- *Significant barriers to care remain for parts of the population:* These barriers include financial access, geographic access in some cases, and also poor provider-patient interactions (including under-the-table payments and behavioral issues).
- *Low or unequal use/coverage of health services presents a problem:* Use for public sector curative services is low overall, and coverage is low in some geographical areas for priority health services, including some maternal and child health services.
- *Potential inefficiencies exist in distribution and use of resources:* Resources allocated (personnel, beds, and so forth) do not currently correspond well with use, as seen in low bed-occupancy in public hospitals and overstaffing of low-level personnel.
- *Quality of care is at best inconsistent:* From both a technical and a patient perspective, the quality of care provided in public facilities is not adequate. The perception of quality in

private facilities is higher, but neither the technical level of quality nor the efficiency is known.

- *Even though systems have been designed, they are generally not implemented fully as intended:* In many areas, it may not be sufficiently clear how to operationalize the service delivery so that it meets the needs and expectations of the population. Definition of criteria for good service delivery organization (staffing, integration, continuity) appears to be insufficient.
- *No clear policy exists on how to ensure the quality of health services for the country, nor is there a “culture of quality”:* Few incentives exist in the public health system to provide quality care, and many inherent incentives in fact lead to poorer quality of care. Application of quality assurance methods is not diffused throughout the country.

### *Opportunities*

Current opportunities to strengthen health service delivery exist—there is a base to build on. The new government’s emphasis on change, including accountability and transparency, offers new energy.

### *Threats*

The major threats to the health service delivery system are the lack of discipline and few incentives that motivate the health personnel to perform as outlined in various strategies and documentation of norms and standards. The biggest threat is that the problems are seen as a lack of resources. Although that is an issue, more resources alone will not solve the health service delivery problems—something needs to be done to encourage health personnel to work where they are needed, when they are needed, and in a manner consistent with respect for patients and in compliance with norms.

Another threat to the health service delivery system is the effect of large amounts of funding coming in for specific diseases that require achievement of results. Because the health service delivery system is weak, often parallel systems are being implemented that are not sustainable and do not strengthen the system itself.

### *Options*

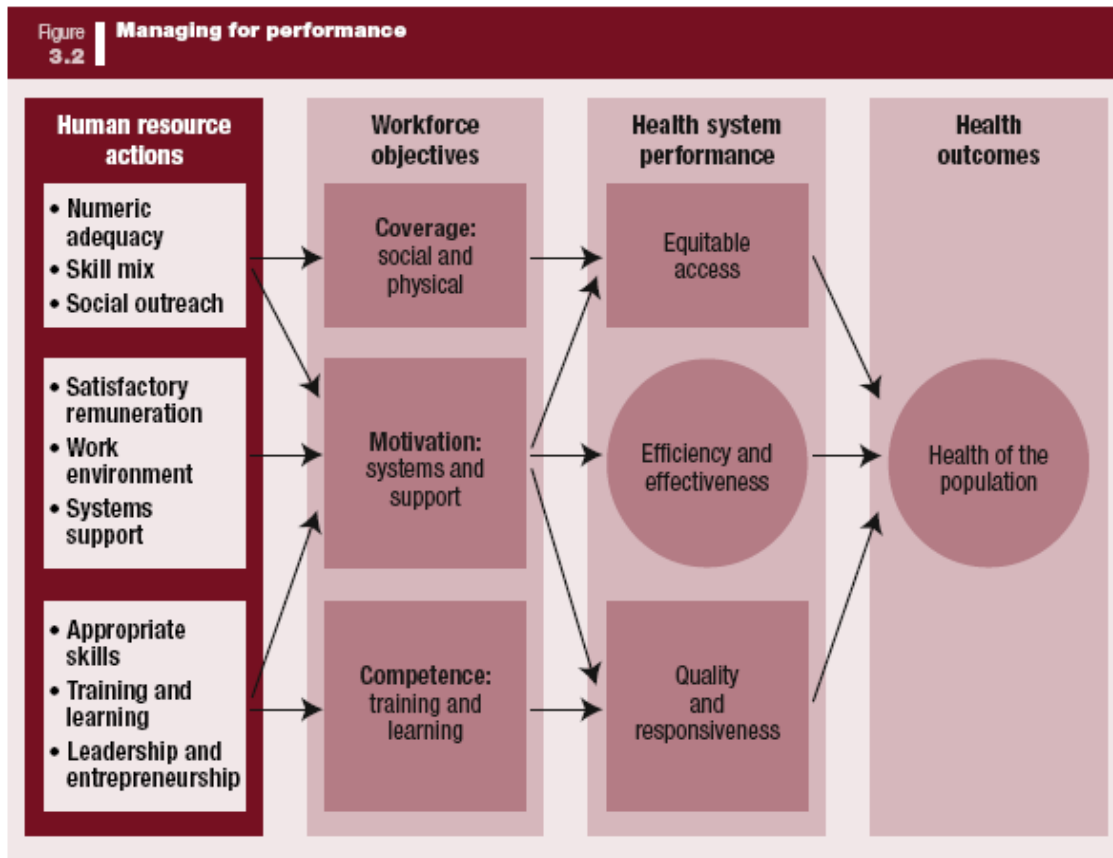
Many of the options to improve health service delivery are closely linked with the six other elements examined in Section 4. Those listed in Annex 1 are more specific to health service delivery, but their effectiveness will depend on implementation of other options as well.

## **Human Resources**

Human resources constitute a critical element for a well-functioning and well-performing health system. Improvement of the quality of services and achievement of health outcomes depend on available, competent, and motivated workers. “Human resources/human resources management”

refers to the people who work in an organization and the organizational function that effectively manages and uses the people who work in the organization. The human resources function in a health system is important because it addresses an organization’s or health system’s need for a competent, stable workforce that meets its needs: that is, having the right number of skilled service providers in the right location at the right time.

Figure 13 shows the interaction and effect of having the right number and distribution of competent, motivated, and well-supported workers on the system’s performance and, ultimately, on the health outcomes of the population.



Source: Benin Systems Assessment Approach. Draft Manual for Pilot Test in Benin.

**Figure 13. Managing human resources for performance**

Human resources actions, if well managed and implemented, lead to workforce objectives that include coverage, motivation, and competence. Good coverage of health personnel influences equitable access; motivation influences efficiency and effectiveness; competence influences quality and responsiveness. Equity, efficiency, and quality, which are all determinants of health system performance, lead in turn to positive health outcomes for the population.

Human resources actions that contribute to achieving health objectives can be classified into five categories: planning, policy and regulations, performance management, training and education, and incentives. In each of those categories, the human resources component of the Benin health system is assessed using specific performance criteria or indicators.

The Benin health system has four main categories of personnel: (1) permanent government employees (Agents Permanents de l'État, or APE); (2) contractual government employees (Agents Contractuels de l'État, or ACE) who hold short- or long-term contracts with the government but who can become permanent government employees after four years of service; (3) contractual employees recruited under a special government program called "Social Measures" (CMS); and (4) contractual employees recruited through community financing funds (CFC). The human resources functions related to permanent and contractual government employees are still centralized, whereas the other two are highly decentralized (recruitment and management at the local level).

Benin health professionals are found in both the public and private sector (see description of private sector under Private Sector Engagement). Doctors (generalists and specialists) get their education at the University of Abome-Calavi Faculty of Health Sciences. That faculty has trained 1,003 doctors since its creation in 1971. The Dr. Alfred Comlan Quenum Regional Institute of Public Health trains doctors specializing in public health and epidemiology. The institute is part of the Abome-Calavi Faculty of Health Sciences and has trained 380 doctors since 1991 (SNIGS-*Annuaire des Statistiques Sanitaires 2004*).

Nurses, midwives, social workers, and laboratory and other health technicians are trained at the National Medico-Social Institute (INMES). INMES is composed of five schools that train these different categories of medical professionals. It is under the authority of the Ministry of Technical Education and Professional Training. From 1992 to 2004, the institute had trained 3,063 nurses. In 2002, a specialized school was created to train nurses and midwives in anesthesiology and cardiopulmonary resuscitation (CPR). The National Nursing School of Benin (ENIAB) and the National School of Sanitation and Hygiene (ENAAH) are three-year professional and technical institutes based in Parakou that train, respectively, assistant nurses and hygiene and sanitation health workers. More than 2,355 assistant nurses have been trained at ENIAB since its creation in 1973, and 29 hygiene workers have completed their training in 2004 at ENAAH, which was created in 2001 (SNIGS-*Annuaire des Statistiques Sanitaires 2004*).

Salaries of medical health professionals in the public sector are comparable to those of other categories of professionals working in the public sector, but they are lower than those of health professionals working in the private sector.

### ***Analysis of Strengths and Weaknesses of Human Resources in the Benin Health System***

This analysis focuses more on human resources in the public sector because not enough data exist currently on human resources in the private sector. Over the last few years, the Benin government has shown great attention to human resources and has taken a number of actions to improve this component of the health system. Human resources management has been identified

as one of the five priorities in the 2002–2006 MoH National Policy and Strategy document. Four key elements were selected as focal points for better management of human resources: strengthening operational management of human resources, strategic planning for human resources, career management, and improving employees' working conditions. The MoH is currently developing a comprehensive policy and strategy of human resources as well as strategies for motivating health workers to retain them in their posts.

After the economic crisis during the 1980s and various structural adjustment programs that froze recruitments in the public sector, the government gradually resumed recruitment in 1995. In 2004, 1,625 contractual employees were recruited through the “Social Measures” fund, and 282 permanent and contractual government employees were recruited through the regular MoH budget. The MoH has also taken steps to train specialists locally and continues to provide scholarships for long-term training abroad. In 2004, scholarships were provided to 18 generalist physicians to pursue their specialization at the University of Cotonou, 20 medical students were offered scholarships for their practical training outside Benin, and 21 nurses got scholarships to specialize in various fields (MoH Performance Report 2004<sup>24</sup>).

Continuing education seems to occur within each health unit or program, and a promising mentorship program has been set up under which new graduates who complete practical training or employees who complete in-service training receive follow-up visits from their instructors to make sure they apply the new skills they learned and to help them solve on-the-job difficulties they may be experiencing.

Despite the efforts made to improve human resources, the MoH still faces significant challenges to ensure availability of well-trained health personnel and their equitable distribution across the country. The efforts made remain small compared to the needs and magnitude of the problems to be addressed. The lack of enough competent, well-motivated, and well-distributed health personnel, especially specialist doctors, is one of the major factors that hinder the delivery of high-quality health services and the improvement of health conditions of the Beninese population. In addition to the inadequate number of qualified health personnel, poor management of available personnel constitutes a major problem that requires immediate attention. The following sections analyze these challenges in more detail.

#### *Number and Distribution of Health Personnel*

With efforts to increase availability and access to health care, many health centers have been created that require a sufficient number of well-trained professional health workers. Unfortunately, a critical shortage of health personnel exists, especially specialized doctors at all levels of the health pyramid (central, intermediate, and peripheral). Table 8 shows the number of professional health personnel in the main personnel categories currently available in the public sector and their ratios to the population.

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<sup>24</sup> Ministry of Health, Republic of Benin. June 2004. *Revue Annuelle du Secteur Santé 2004*.

**Table 8. Specialist Physicians in Benin's Public Health Sector**

Category/Specialty	APE	ACE	CMS	CFC	Others	Total
Generalists	87	56	32	14	12	201
Anesthesiologists and CPR specialists	1					1
Biologists	3					3
Cardiologists	1					1
Dentists		2				2
Development health specialists					1	1
Epidemiologists	6	2				8
Gynecologist-obstetricians	30	1	3	1		35
Health administrators	2					2
Hematologists	1					1
Internists	1					1
Kinesiologists	1					1
Malaria specialists	1					1
Microbiologists	1					1
Nephrologists					1	
Nutritionists	2					2
Occupational health specialists	2					2
Ophthalmologists	9			1		10
Pediatricians	21		1	3		25
Planning specialists	1					1
Psychiatrists	1					1
Public health specialists	50	6		1	3	60
Radiologists	2					2
Surgeons	21	1	1	1	1	25
Trauma specialists	1					1
Total specialists	158	14	4	7	6	189

Source: DRH database 2004.

APE = permanent civil servant; ACE = contractual government employee; CMS = contractual employee through "Social Measures" fund; CFC = contractual employee paid through community financing funds.

As Table 8 shows, very few specialists practice in the public sector in key areas, such as surgery (25), gynecology/obstetrics (35), pediatrics (25), internal medicine (1), dentistry (2), anesthesiology (2), cardiology (1), and psychiatry (1), especially if the 34 health zone hospitals are considered alone, which are supposed to be staffed with surgeons, obstetricians/gynecologists, and pediatricians. In contrast, there are a great number of public health specialists (60). This disparity indicates that the inherent incentives of the system appear to induce physicians to move toward public health rather than clinical specialties: public health physicians are most likely to be selected as Health Zone Medical Coordinators, where they can have control over resources. They also have a greater chance of being recruited by international donors and



NGOs, which pay higher salaries than regular government jobs. An assessment of needs in specialist physicians conducted in 2003 shows a bleaker picture (see Table 9).

**Table 9. Needs in Selected Specialties, 2003**

Specialty	Needed (WHO Standards)	Existing (Care Providers)	Needs for 2003
Gynecology	78	33	45
Surgery	111	24	87
Pediatrics	111	22	89
Anesthesiology	98	2	96
Internal Medicine	98	2	96
Gastroenterology	30	1	29

Source: DRH. 2003. *Communication sur la situation des travailleurs spécialistes médicaux au Bénin. Besoins, problèmes, et perspectives.*

As Table 9 shows, the needs in physician specialists in the most important specialties in 2003 were huge, and the situation has not changed much (see Table 8). The government therefore needs to devote a considerable amount of resources to increasing physician specialists in the public sector.

Concerning nurses, Benin currently has enough. However, as is the case for physicians, Benin lacks specialized nurses in key areas, such as anesthesiology, surgery, stomatology, kinesiology, and radiology. The same analysis of needs done in 2003 by the Human Resources Directorate (DRH) showed 593 specialist nurses in the public sector compared to the WHO recommended standard of 1,781 nurses for Benin. The gap in the “unmet need” was twice (1,188) the number of existing personnel.

In addition to the critical lack of specialists in key health areas, the existing personnel (including specialists) are unequally distributed in the country (Table 10). From, one would think that Benin has good coverage in terms of professional health workers. Benin’s average ratios of doctors, nurses, midwives, and lab technicians are above the WHO standards. However, a lot of disparities exist between various regions of the country in terms of distribution of health personnel. Also, disparities exist in health personnel between the public and private sectors because most doctors prefer to work in the private sector where they have better salaries and working conditions. Table 10 shows that 571 doctors (55 percent) work in the private sector compared with 439 (45 percent) in the public sector. (See more discussion of these disparities in the Health Service Delivery section.)

The unequal distribution of health workers in the country is mainly because workers do not want to work in remote areas where living conditions are harsh and opportunities for advancement and extra work (moonlighting) in the private sector are limited. Workers who agree to work in rural areas become demotivated, which results in a high turnover rate, absenteeism, low job performance, professional negligence, lack of respect for patients, lack of respect for their superiors, illicit sales of medicines, under-the-table payments for health services, and other corrupt and immoral acts.

**Table 10. Ratios and Distribution of Key Health Personnel in Benin**

Department	Doctors			Pop. per Doctor	Nurses			Pop. per Nurse	Midwives			Women of Child-bearing Age per Midwife	Lab Technicians			Pop. per Lab Technician
	Pub.	Priv.	Total		Pub.	Priv.	Total		Pub.	Priv.	Total		Pub.	Priv.	Total	
Atacora/ Donga	31	24	55	17,461	233	4	237	4,052	87	2	89	2,343	26	2	28	34,298
Atlantique/ Littoral	205	469	674	2,324	655	178	833	1,880	277	92	369	1,125	163	13	176	8,898
Borgou/ Alibori	46	14	60	22,159	452	—	452	2,941	95	9	104	2,736	52	11	63	21,104
Mono/ Couffo	50	9	59	16,008	283	38	321	2,942	80	4	84	2,585	37	1	38	24,855
Ouémé/ Plateau	63	32	95	8,213	369	87	456	1,711	155	39	194	1,572	63	17	80	9,753
Zou/ Collines	44	23	70	17,325	369	62	431	2,814	126	27	153	1,820	56	10	66	18,375
Benin	439	571	1,013	7,135	2,361	369	2,730	2,648	820	173	993	1,705	397	54	451	16,027

Source: DRH/DPP, DIVI/MSP, 2004, Recensement des formations sanitaires privées au Bénin 1998, Résultats provisoires étude analytique de l'existence et le fonctionnement des formations sanitaires privées 2003.

Another problem facing human resources in Benin, particularly specialists, is age. More than 60 percent of specialists will retire in five years. The shortage in specialists, which is already severe, will worsen unless something is done to replace them (see Table 11).

**Table 11. Estimated Number of Specialists, 2010**

Specialty	Number in 2003	Retirements between 2003 and 2010 (Reduction Rate)	Remaining in 2010
Gynecologists	47	35 (74%)	12
Surgeons	39	24 (61%)	15
Pediatricians	27	22 (81%)	5
Anesthesiologists	5	4 (80%)	1
Public health specialists	67	46 (69%)	21

Source: DRH. 2003. *Communication sur la situation des travailleurs spécialistes médicaux au Bénin. Besoins, problèmes, et perspectives.*

### Strategic Planning

Human resources management is also hampered by the lack of a strategic plan that emanates from the MoH mission, goals, and needs. No staffing plan includes job classifications and long-range planning for recruitment and training. One of the constraints for strategic planning is the lack of complete and accurate data on health personnel in Benin (particularly because so many categories are managed at different levels) and the lack of enough financial and human resources specifically dedicated to management of human resources

### Human Resources Data for Planning

Employee records exist and are kept at the central level (Human Resources Directorate), and intermediate levels (Health Department Directorate [DDS] and Health Zone). Records for permanent and contractual government employees are stored at the central level. They contain information on skills and education level of staff, gender and age, year of hire, and salary level. A database system using Virtualia software has been set up to store this information and generate reports. At the intermediate level, the DDS and the Health Zone keep duplicate records for government permanent and contractual employees and records for contractual staff hired under the “Social Measures” and community financing funds. They also store these records in the Virtualia system. Despite the existence of a data system, problems still exist at the central level in getting complete and up-to-date information on personnel because of constant changes in staff caused by departures, promotions, and transfers and because of the lack of an electronic network (intranet) linking the central and intermediate levels. The DRH at the central level does not have dedicated personnel (counterparts) at the intermediate level to continuously update information on human resources and communicate the updates to the central level. In addition, the Virtualia software still does not have the capacity to perform all the key functions (for example, it cannot be programmed to extract all the desired reports), but the DRH is working on that problem.

The Directorate of Human Resources does not have complete information on personnel working in the private sector.

### Human Resources Staff and Budget

Although a budget is allocated to human resources annually, it is not enough to allow better planning and management of this key function of the health system. For example, the directorate currently employs 40 people, but only 10 of them can perform human resources functions including planning and forecasting. No staff members are dedicated to human resources at the intermediate level (DDS and Health Zone). The human resources tasks are usually combined with finance or administration, which would not be a problem if finance or other people playing the role of human resources managers were trained in that field.

### *Policies and Regulations*

The Benin health system suffers from insufficient basic human resources policies and regulations and fails to effectively apply existing policies. Although a job classification system exists, no detailed description exists of each type of job, including job title, main responsibilities or tasks to be performed, the minimum skills and qualifications required for the job, and the person supervising the employee for that specific job. The absence of clear job descriptions is a problem because employees do not know the expectations of their job so they can work to meet those expectations. Without clear job expectations, objectively measuring employee performance and rewarding employees according to their performance are difficult.

An employee manual exists for permanent and contractual government employees, but it is too general (lists only statutes regulating civil servants, but does not describe in detail employee benefits and specific regulations applied in the workplace, such as work hours, time sheets, moonlighting, and overtime). Also, the manual is usually in the hands of the directors or managers even though every staff member is supposed to have a copy. Employees are usually briefed when they are hired about rules and regulations contained in the manual, but they are not given a copy of the manual. The manual is the only “contract” that binds the government with civil servants. Without it, employees are not aware of their duties, rights, and obligations to the government and the government’s duties and obligations to them. This lack of awareness can lead to errors and abuses on both sides. Awareness and understanding of work rules and regulations could greatly reduce conflicts in the workplace.

Although regulations exist for permanent and contractual government employees (albeit not disseminated), no rules and regulations exist for contractual employees hired under the “Social Measures” and community financing funds, which is a problem because those employees are not protected by any laws regarding compensation, benefits, or working conditions. Interviews and some document review indicate that the lack of regulation related to CMS and CFC and its decentralized implementation are leading to sometimes inappropriate recruitment (too many low-level staff and not a good balance or distribution). Often the Health Zone Medical Coordinator is not involved in planning for these recruitments.

For government permanent and contractual employees, a compensation and benefits system exists as well as a formal process for recruitment, hiring, transfer, and promotion. However, the latter are barely followed. Instead, objective systems for recruitment, hiring, transfer, and promotion are often substituted with favoritism, cronyism, and personal relationships. Promotion appears not to be generally based on performance or merit, but on “who you know” or “connections.” Decisions to transfer or discipline employees can easily be overturned by higher-ranking government officials.

Decisions about hiring, transfer, disciplinary measures, and promotion are also not entirely decentralized. Only the Ministry of Labor and Civil Servants has the authority to fire staff, but this rarely happens because of the “protective” nature of the government system. In effect, employees can do whatever they want without worrying about losing their jobs. This situation contributes to decreased productivity, reduced staff morale, and general poor performance of the health sector.

Government employees are usually hired at the central level in Cotonou (by the Ministry of Civil Servants) and assigned to the various health departments or units that need them. However, those units are not involved in the hiring process even though they best know their needs. As a consequence, some of the recruits who are “made available” to the health departments are not competent for the work to be done but cannot be fired because they are protected by those who hired them.

The existence and rigorous application of policies regarding compensation, benefits, recruitment, hiring, transfer, and promotion for all types of workers promote fairness and equity in the workplace. Failure to implement such policies affects the working environment and can negatively affect staff morale and performance. It also creates a situation of impunity observed in the health sector and other government sectors and ultimately affects the quality and impact of health programs.

Finally, although personnel licensing regulations are in place, they are not sufficiently enforced, which makes it easier for physicians and other health workers to work in the private sector and may lead to low quality of care caused by lack of rigorous screening, supervision, and recertification of health care providers (see more discussion on personnel licensing regulations under Private Sector Engagement).

### *Career and Performance Management*

Career management is a major problem in Benin for all government employees. The current management of careers in the government sector does not correspond to today’s reality in the job market and is one of the causes of low-level performance of the public sector in general. In Benin, government workers are hired “for life” no matter what the country’s economic conditions may be. Although hiring freezes occur, downsizing the public sector is hardly seen as a viable option. The promise of job stability in the government sector is among the factors that contribute to low performance and impunity, which in turn have adverse effects on the quality of services provided. In an environment characterized by scarce financial resources, efficiency and performance should be the rule. Unfortunately, individual performance reviews, although

conducted annually, are more an administrative formality than mechanisms to reward performance and develop employee careers. Performance criteria are not objective or related to performance (especially for permanent government employees), but emphasize more the character or behavior of staff (discipline, punctuality, honesty, and so forth). The performance review process is not participatory and transparent. Supervisors assess the performance of employees, assign grades, and send the performance reviews to the next level for approval without meeting with their employees to discuss performance. The performance review system does not explicitly include discussion and feedback about performance.

Although supervision appears to take place, it is not consistently done and no formal process for supervision is applied nationwide (see Health Service Delivery for more details). The links between supervision, worker performance, and employee career management are not operationally clear. Employees who are performing are sometimes sent “congratulation” letters, but no formal way exists for developing plans for staff with low performance. Supervision of the health facility as a whole takes place through what is called *monitorage*, which is done semi-annually and is a review of health facility performance on some key health indicators. If monitoring targets have been met, all staff members receive a small bonus (*prime*), which is a good way to motivate them to perform even better in the future. Health facilities are ranked against each other, which can also stimulate those that are not performing well to do better and be recognized.

In brief, the incentive structure in the Benin health system does not encourage performance. Employees behave according to the implicit or explicit incentives that are offered to them. An in-depth review of these incentives for each category of personnel is needed to address the problems mentioned.

### *Training*

In-service training seems to take place within individual departmental public health directorates (Direction Départementale de la Santé Publique; DDSP) and programs, which is a great strength, as previously mentioned. The mentorship program also mentioned earlier is an innovative way of providing in-service training. However, most of the training provided is ad hoc and not based on a specific training plan that outlines the MoH needs and the type of training required to address those needs. The Human Resources Directorate is not involved in or informed about the trainings that occur within individual departments or units. The lack of planning and coordination of training programs greatly handicaps the MoH’s capacity to meet its human resources needs over time. Also, except for the mentorship program, the training that takes place is not evaluated for its effectiveness, especially assessing whether employees perform better on the job after receiving training.

Specialized continuing professional education and long-term training are usually managed at the central level, but they are also ad hoc and not based on a well-designed strategy and plan. No management and leadership development program allows training of future health leaders and managers.

Ensuring that preservice training includes the most recent protocols and norms and covers the range of responsibilities students will have when they graduate and begin work tends to be underemphasized. However, in a few cases protocols and norms are integrated into the curricula. For example, Promotion Intégrée de Santé Familiale (PROSAF) worked with the nursing school in Parakou to insert the new family health protocols and integrated service delivery directly into the curriculum.

No “feedback loops” exist between the organization and preservice training institutions. The MoH has no systematic process for feeding its needs regarding skill sets and cadres into preservice curricula. Although the MoH offers practicum sites to the schools, preservice training institutions do not offer in-service training to the MoH. Apart from practical training that occurs at the end of course work, the curricula that are taught at preservice training institutions do not include practical aspects of health care delivery, such as policies or norms and standards. Preservice training institutions do not get feedback from the MoH regarding whether they are teaching the correct curricula or producing the right numbers of staff members and whether those staff members enter their profession with the right set of skills to do their job.

## **Conclusions**

### *Strengths*

One of the greatest strengths in human resources management is the recognition by the MoH that this component of the health system is central to any efforts to improve the entire health sector. Because of this recognition, human resources management is now considered as one of the priorities of the ministry. As a result, a number of efforts are being made to improve human resources, such as developing a comprehensive human resources policy and strategy, developing incentives for personnel working in the public sector, training specialist doctors locally, and improving in-service training through special programs such as mentoring.

Some models for effective human resources management at departmental level are emerging from Borgou/Alibori.

### *Weaknesses*

The preceding strengths and efforts are likely to produce limited results because of the many weaknesses identified, which are summarized as follows—

- Critical shortage of medical personnel in the public sector, particularly specialist doctors (surgeons, pediatricians, gynecologists/obstetricians) because of insufficient funding for recruitment and training of these categories of personnel
- Unequal distribution of existing health personnel, which leaves rural areas underserved
- Aging of existing personnel
- Lack of strong incentives to address the lack of personnel and their unequal distribution

- Inadequate management of human resources as reflected by—
  - Lack of policies and regulations or lack of application of existing ones (job classifications systems/descriptions, compensation and benefit system, process for recruitment, hiring, transfer, discipline, and promotion, employee policy manual, registration and licensing of personnel)
  - Lack of career and performance management: lack of performance planning; lack of formal, objective, fair, and participatory mechanism for performance review; lack of formal and consistent supervision process
  - Lack of effective coordination because of multiple mechanisms for recruitment and contracting (APE, ACE, CMS, CFC), which are conducted at various levels
- Weak planning of preservice, in-service, and long-term training and education
  - Insufficient coordination of training between DRH and various departments and programs, especially long-term training, which is supposed to be managed by DRH
  - Lack of effective linkage and feedback loops between MoH/health service delivery sites and preservice training institutions
  - Lack of management and leadership development program

### *Opportunities and Threats*

The fact that human resources is getting high-level attention among policy makers and the donor community is a great opportunity to improve this component. However, one immediate threat needs to be eradicated to see any improvements: if the human resources management systems and mechanisms in place to ensure fairness, equity, access, and quality are not respected (because of corruption and the culture of impunity within the government system overall), the likelihood is minimal that a change on the ground will occur.

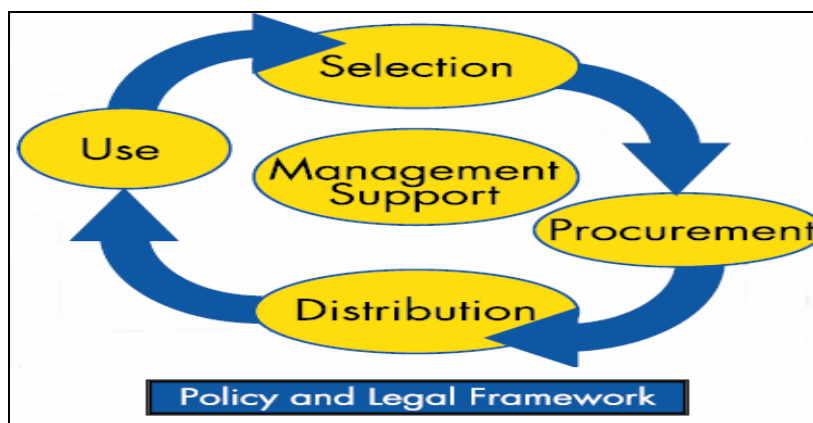
### *Options to Consider*

Because human resources plays a major role in the delivery of health services, the government will be best served to make extra efforts in this area and make it the first priority in its upcoming health policy and strategy document. The government through the MoH should build on efforts already under way to improve the sector by crafting a comprehensive human resources strategy that includes specific and long-lasting solutions to the identified human resources weaknesses. Annex 1 presents just a few options the ministry and other stakeholders might consider.



## Pharmaceutical Management

Pharmaceutical management “represents the whole set of activities aimed at ensuring the timely availability and appropriate use of safe, effective, quality medicines and related health products and services in any health care setting.”<sup>25</sup> Selecting appropriate essential medicines and other pharmaceutical products, their efficient procurement and distribution, and ensuring that they are used rationally are the key activities in the pharmaceutical management cycle (Figure 14). These activities operate within and are influenced by the existing regulatory framework and are affected by the level of management support (the financial, human, and other resources) available.



Source : Management Sciences for Health and World Health Organization. 1997. *Managing Drug Supply*. 2nd ed. West Hartford, CT : Kumarian Press.

Figure 14. The pharmaceutical management cycle

### Pharmaceutical Policy, Laws, and Regulations

The Directorate of Pharmacies and Medicines (DPM) of the MoH has the overall responsibility for the regulation of the pharmaceutical sector. Effective enforcement of the policies, laws, and regulations of the pharmaceutical sector remains the biggest challenge.

#### Pharmaceutical Laws and Decrees

In 2000, the DPM conducted a comprehensive review of the laws and decrees governing the pharmaceutical sector in Benin. The laws and decrees identified as part of this review process were collected and published in one document: *Recueil des textes législatifs et réglementaires sous secteur pharmaceutique*, 2nd edition, April 2001. This document includes the current laws and decrees relating to registration and licensing of medical personnel; registration and licensing of the private medical facilities and pharmaceutical outlets; and regulatory requirements for the

<sup>25</sup> Islam, M., ed. 2006. *Health Systems Assessment Approach: A How-To Manual*. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20 Project (HS20/20), Partners for Health Reformplus, Quality Assurance Project, and Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

registration, importation, and sale of medicines and other pharmaceutical products in both the public and private sectors in the country.

### *National Pharmaceutical Policy*

Since 1991, the DPM has developed three five-year national pharmaceutical policies. The main objective of the first policy document, which covered the period 1991–1994, was to improve access to and the availability of quality essential medicines. The most current version of the policy document covers 2000–2004.<sup>26</sup> This policy document has three specific objectives: ensure access to and the availability of essential medicines, ensure the safety and efficacy of the medicines, and ensure rational use of medicines. An evaluation of the 2000–2004 national pharmaceutical policy is planned for 2006. The DPM recognizes that this evaluation process is a couple of years late, but resource constraints prevented an earlier review. The new five-year policy will be developed after this evaluation.

One component that appears to be missing from both the pharmaceutical laws and decrees, and from the national policy as well, is a law or regulations governing the management of donated pharmaceutical products. Interviews at both the central and peripheral levels cited the management of donated pharmaceutical products as a key problem in the sector—for example, issues related to when to accept or refuse short-expiry donated products and managing the storage and distribution of the donated products within the context of a fee-for-service public pharmaceutical sector.

### *Registration of Pharmaceutical Products*

The Registration, Statistics, and Quality Assurance Service (SESCQ) of the DPM is responsible for most of the regulatory activities of the DPM. All pharmaceutical products introduced for use in the country must be registered by the Registration Division of the SESCQ. The system for the registration of a pharmaceutical product is relatively well defined.

The information required for registration includes the dosage form, strength, and presentation of the product; the manufacturer of the product; the manufacturer's wholesale price for the product; and a technical portfolio providing evidence of the safety, efficacy, and packaging of the product. The registration dossier is reviewed by a technical committee that includes the director of the DPM, the director of the National Directorate for Protection in Health (DNPS), the director of CAME, the heads of the Physicians Board and the Pharmacists Board, the head of the quality control laboratory, two university professors, and pharmacists from the referral hospital. This technical committee is required by law to meet three times a year and must provide a response to an application for registration within four months unless additional information is required from the applicant. In 2004, 148 applications for registration were reviewed by this committee. Of those applications, 87 were accepted, 41 were accepted pending a reduction in the sales price, 16 were rejected, and 4 were suspended pending additional information from the

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<sup>26</sup> Direction des Pharmacies et des Laboratoires. Janvier 2000. Politique Pharmaceutique Nationale. Ministre de la Sante Publique, République du Benin.

applicant.<sup>27</sup> No information was available on the total number of pharmaceutical products that are currently registered.

A registration “visa” is valid for five years and must be renewed within the three months prior to its expiration. A separate registration is required for each dosage form and for each presentation of the product. The registration fee for a new product is currently 250,000 CFA francs (XOF), and the renewal fee is XOF 100,000. These fees are submitted to the treasury and are not necessarily earmarked as funds for supporting the Registration Division.

### *Quality Assurance*

Quality assurance of pharmaceuticals is the role of the National Drug Quality Control Laboratory (NDQCL). The NDQCL began operating in 2000, and based on interviews conducted at the central level, does not have sufficient equipment, personnel, or financial resources to adequately fulfill its role. In 2004, the NDQCL tested 312 pharmaceutical products, 95 percent of which were found to conform to the required standards.<sup>28</sup> Currently, the NDQCL is able to perform tests on approximately five pharmaceutical products per day (less for more-complex products). Where the NDQCL does not have the capacity to do the testing, the samples are sent to laboratories in other countries with which the NDQCL has agreements (during the interviews, Tunisia was mentioned as one of the countries used). Strengthening the capacity of the NDQCL would increase the number of tests done.

### *Regulation of the Pharmaceutical Sector*

Enforcement of the pharmaceutical laws, decrees, and regulations is the responsibility of the Service for Inspection and Pharmacovigilance in the DPM. The 2000–2004 policy recognized that the enforcement of pharmaceutical sector regulations was one of the main challenges facing the sector, and this remains the situation today. Insufficient financial resources, human resources, and equipment have all been identified as the reasons for this deficit. Currently, 230 pharmacists are registered in Benin, of whom only 26–27 are working in the public sector. Of those pharmacists working in the public sector, only 7 currently work within the central-level directorates and programs.<sup>29</sup> No postmarketing surveillance system (system to monitor the efficacy, quality, and safety of marketed pharmaceutical products) is in place at present.

### *Selection of Pharmaceuticals*

Since 1989 when Benin started producing an Essential Medicines List (EML), five editions have been developed and disseminated to the health facilities by the DPM. The revision of the EML is expected to occur every two years; however, the most recent edition that was available at the time of the assessment was revised in January 2003. The EML is currently scheduled for revision, though this process has not yet begun. However, the new edition is expected to be published sometime in 2006.

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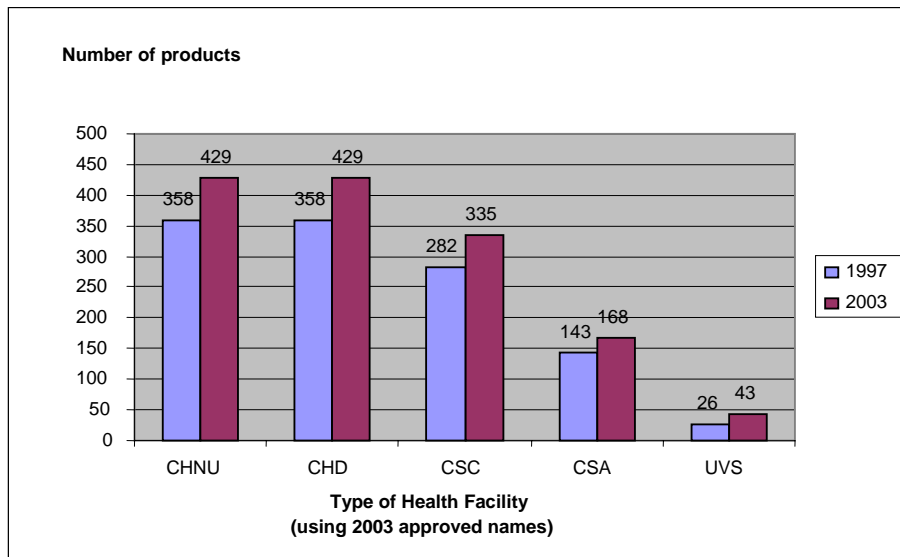
<sup>27</sup> Ministère de la Santé Publique. 2005. *Annuaire des Statistiques Sanitaires 2004*. République du Benin.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

The revision of the EML is done by an ad hoc committee appointed by a ministerial decree and working under the direction of the DPM. This committee is authorized to consult any additional resource persons required to complete the revision. This committee usually includes representation from the DPM, CAME, the chief pharmacist of the CNHU, the president of the Pharmacy Board, pharmacy inspectors, and physician representatives from the CNHU and the Atlantique/Littoral Department. The draft EML they develop is then submitted to a wider group of stakeholders at a validation workshop. This process helps ensure that the EML developed reflects the needs of the country. Development of the sixth edition of the EML is expected to follow a similar process.

The EML uses the generic names for the medicines on the list and categorizes them by level of care. Figure 15 summarizes the number of products in the fifth edition of the EML for each level of care compared with the third edition (revised November 1997). The fourth edition was not available for review. A total of 429 products are included in the fifth edition EML (358 in the third edition). All these products are expected to be available at the hospital level (tertiary care facilities). This number is slightly higher than the average, 300–400 products, that is expected for this level of care. Only 46 products (26 in third edition) are categorized for use in the lowest level of the health system, the UVS. This figure is consistent with the expected average, 40–50 products, for this level of care. However, the number of products that are approved for the CSC level, 335 products, is much higher than is expected for a secondary-level care facility (150–200 products).



Source 1997: *Liste Nationale des Médicaments Essentiels sous Noms Génériques*. Novembre 1997. Direction des Pharmacies et des Explorations Diagnostiqués. Ministère de la Santé, République de Benin.

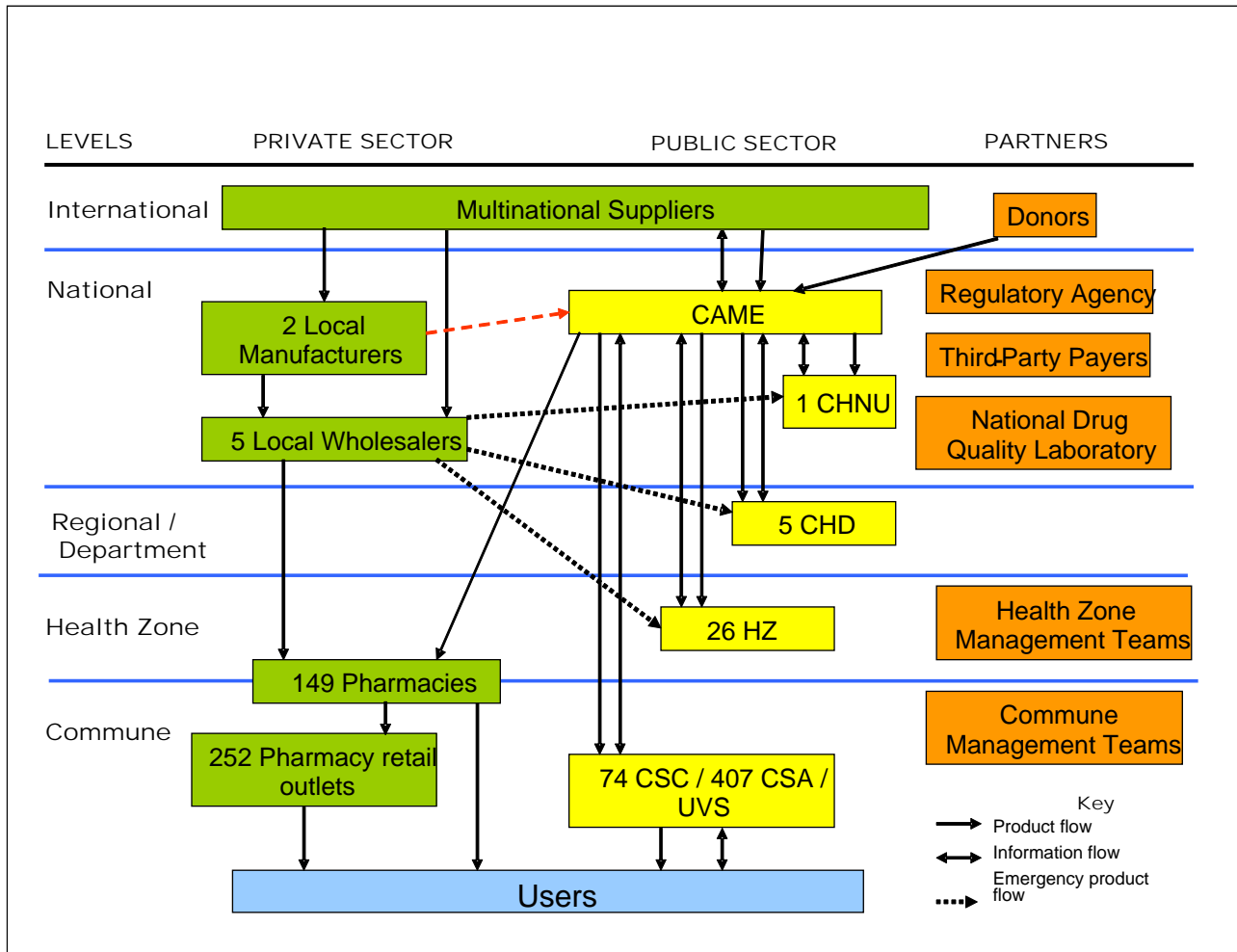
Source 2003: *Liste Nationale des Médicaments Essentiels sous Noms Génériques*. 5<sup>e</sup> Edition. Janvier 2003. Direction des Pharmacies et des Explorations Diagnostiqués. Ministère de la Santé, République de Benin.

**Figure 15. Comparison of the number of medicines and pharmaceutical supplies on the EML in 1997 and in 2003**

**Procurement and Sales**

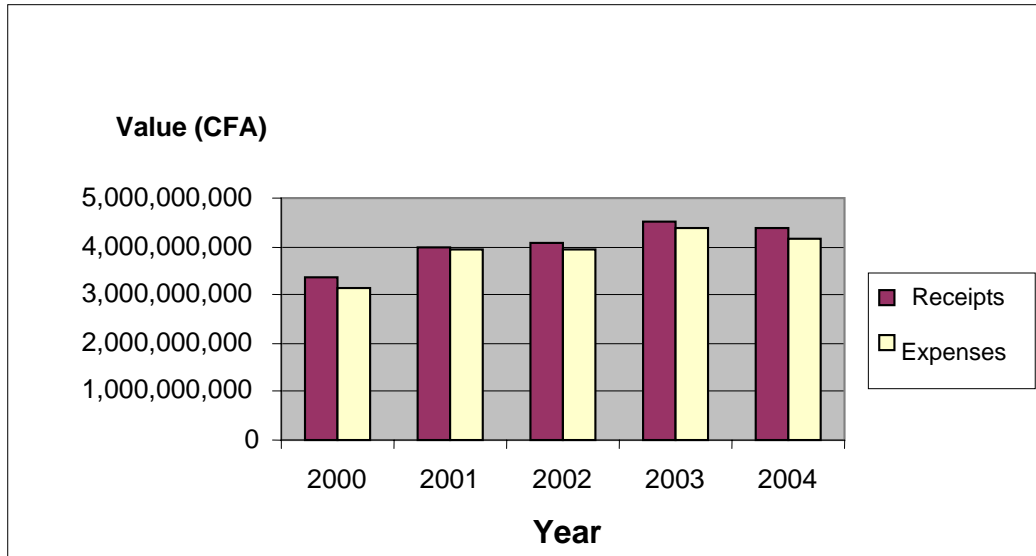
The pharmaceutical supply chain in the formal private and public sectors in Benin is illustrated diagrammatically in Figure 16. All public sector procurement and distribution is done centrally through CAME, a parastatal organization that operates under the supervision of the DPM. Its mandate is to procure and sell essential medicines and supplies at an affordable cost to the public sector health facilities and the private not-for-profit health facilities. CAME is also authorized to sell certain essential medicines to the private for-profit pharmacies. A 20 percent margin is applied on all its sales.

CAME has autonomy from the MoH with respect to management of its operations and its finances. CAME is able to finance its operations and all its procurements from its receipts from the sales of the pharmaceuticals. In 2004, CAME had receipts valued at XOF 4,392 million and expenses of XOF 4,166 million. Figure 17 summarizes the receipts and expenses of CAME over the last five years.



**Figure 16. Benin's pharmaceutical distribution system**

CAME is authorized to procure items (both medicines and pharmaceutical supplies) on the EML only, and thus procures only generic medicines and supplies. Procurement is normally done once every two years through open international tenders; only suppliers prequalified by CAME can bid on the tenders. The list of prequalified suppliers is revised every two years, but submission of applications for inclusion on the list is an ongoing process.<sup>30</sup> CAME develops the tender documents and is responsible for selection of the successful bidders, under the supervision of their Management Committee.<sup>31</sup> Selection of a successful bidder takes approximately 1.5 months from the time a tender is advertised. After placing an order, the lead time to initial delivery is approximately 6–8 months. Delivery is staggered over the two-year period. Approximately 30 percent of the products procured are tested at delivery. This testing focuses on the high-volume products, for example, antibiotics. The testing is done at the NDQCL or through it at partner laboratories as previously discussed.



Source: Centrale d’Achat des Médicaments Essentiels et Consommables Médicaux. 2004. *Rapport d’Activités*. République du Bénin.

**Figure 17. Receipts and expenses at CAME, 2000–2004**

Emergency procurements do occur. The reasons given for conducting an emergency procurement include the delayed delivery of products by manufacturers and the underestimation of requirements. From interviews, over the preceding two years, about 5 percent of the procurements done by CAME appear to have been emergency procurements. All procurements of pharmaceutical products are tax free. The Global Fund–supported projects within the AIDS,

<sup>30</sup> The prequalification procedures and requirements are compiled in one document: “Dossier d’appel d’offres International pour la présélection des fournisseurs de médicaments essentiels sous noms génériques, de réactifs et consommables médicaux. Aout 2005.”

<sup>31</sup> The most recent tender application documents are compiled in one document: “Dossier d’appel d’offres restreint pour la fourniture de médicaments essentiels sous noms génériques, de réactifs et consommables médicaux. Aout 2005.”

tuberculosis, and malaria programs and the vaccine program all currently have independent procurements managed either by the program or by its designated international agents. CAME plays no role in the procurement process for products procured by these vertical programs. The malaria program plans to transition to having CAME manage its procurements by 2007.

Private pharmacies can procure products from only one of the five licensed wholesalers or from CAME (for generic essential medicines). Currently, 172 pharmacists operate private pharmacies, the majority of which are located in Cotonou (100 pharmacies) and Porto-Novo (50 pharmacies).<sup>32</sup> The private pharmacies in turn are the primary suppliers of the products sold at the pharmacy retail outlets (*dépôts pharmaceutiques*).

In summary, the procurement process in both the public and private sectors in Benin is well defined and in the case of the public sector procurements, the process appears to be consistent with international requirements. However, the public sector procurement agency, CAME, is concerned that the procurement process is too arduous and confusing.

### **Storage and Distribution**

Storage of pharmaceutical products for the public sector is managed centrally by CAME, including storage of products that it procures, products that are donated, and products procured independently through vertical programs and other agencies. Currently, CAME does not charge the vertical programs or the other agencies any handling fees for storing and managing the products they procure; nor does it charge for any handling fees for donations. It has no authorization to charge any handling fees. Thus, the costs of handling those products must come out of CAME's own operating budget, which could compromise its long-term financial stability.

CAME has one central warehouse in Cotonou and a regional warehouse in Parakou that has been operational since 2004. A second regional warehouse was opened in Natitingou in 2005.

Storage capacity at the central warehouse and at the regional warehouses remains a major challenge for CAME. The central warehouse is currently beyond its storage capacity. CAME is authorized to rent warehouse space from the private sector when needed, but it must pay for this rental. Additional capital investment is required to build or purchase additional warehouse space, but this expense is currently beyond CAME's budget.

Inventory management at CAME is computerized. Inventory losses through expiration were cited as problematic during the interviews, particularly because of the lack of coordination of procurements with donors and parallel programs, which can lead to duplicate procurements. The assessment team was not able to obtain the value of the recent losses at CAME that were caused by expiry, damage, or theft.

Distribution of all products purchased from CAME is managed through a pull, or requisition-based, system. The health facilities are responsible for determining the quantity of products they wish to purchase and for delivery of their orders to their health facilities. Most of the health facilities do not have their own vehicles and therefore have to rely on public transportation when

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<sup>32</sup> Interviews with the Director of the DPM and the Head of the Pharmacy Board.

making their purchases at CAME or at the two regional warehouses (CAME has an arrangement with the railway system to transport supplies to the regional stores). To address the transportation challenges faced by health facilities, some health zones are pooling together the requests from all the health centers in their zone and then hiring a private trucking company to pick up the supplies at CAME. The breadth of this practice is unclear, but it may be a useful model for other health zones to pursue to help alleviate the transportation challenges faced by the health facilities.

The personnel at the health facility level are not always qualified to appropriately manage and dispense the pharmaceutical products. No standards govern who should be hired as a dispenser in the health facility (hiring is the responsibility of the COGECS). Estimation of future requirements (quantification) by the health facility staff has been cited as one of the challenges in ensuring the availability of required pharmaceuticals, and the lack of capacity of the health facility staff to do this type of activity has been cited as the reason. Inventory management tools, including stock cards and stock registries for use at the health facility level, have been developed by the DPM and the DPP and are part of the tools disseminated by SNIGS. However, SNIGS does not collect information on the availability of medicines at health facility level; so those data are not readily available at the central level to assist in the planning process.

## **Access to Quality Products and Services**

### *Geographic Access*

All the public health facilities have dispensaries; so access to a public health facility should theoretically mean that geographic access to essential medicines exists within the public sector. In fact, 86 percent of the population has access to a health facility (Table 7). Access to private pharmacies and pharmacy retail outlets is more limited. Approximately 80 percent of the urban population and only 15 percent of the rural population in Benin had access (within 5 kilometers) to a pharmacy/pharmacy retail outlet in 2001 (Figure 12).

The laws specify how far apart licensed pharmacies are to be located. To increase access to private sector pharmacies, the government also licenses retired medical staff to operate pharmacy retail outlets (*dépôts pharmaceutiques*). Each pharmacy retail outlet is linked to a registered private pharmacy from which it procures its supplies.<sup>33</sup> The pharmacist who owns the private pharmacy is required by law to supervise the activities of its linked pharmacy retail outlets. If a pharmacy opens in an area where a pharmacy retail outlet already exists, the law requires that this retail outlet be closed or be relocated to a different area. Pharmacy retail outlets are located primarily in the regions outside of Cotonou and Porto-Novo. Although the laws governing the functioning and location of the pharmacies and pharmacy retail outlets are fairly comprehensive and are readily available, their enforcement is definitely problematic. If the private pharmacies have supervisory roles over the pharmacy retail outlets, and more than 90 percent of these private pharmacies are located in the coastal regions (Cotonou and Porto-Novo), the few pharmacies located outside these regions clearly cannot regularly supervise all the pharmacy retail outlets in these regions.

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<sup>33</sup> The registered private pharmacy is considered to be the “owner” of the linked pharmacy retail outlets.



## Price

As discussed in under Health Financing and represented in Figure 8, Benin spends a higher proportion of its total health resources on pharmaceuticals than any of the other 25 comparison countries. Prices of pharmaceutical products sold in the public sector are not fixed. Each health facility together with its management team determines the price of its products. The review of the 1990–1999 national pharmaceutical policy found that on average the health facilities were selling their products at 2.5 times their purchase price from CAME. CAME’s own review last year found that the markup was as much as 4–5 times the purchase price. This lack of regulation of the price of pharmaceuticals in the public sector contrasts with the regulation in the private sector. Prices of pharmaceutical products sold in the private sector are regulated by the government. The expectation of this policy is that the price of a pharmaceutical product should be the same irrespective of where the client makes his or her purchase. The law currently allows for a retail price of 1.78 times the manufacturer’s wholesale price for each pharmaceutical product registered and sold in the country. The markup includes the margins for the supplier and the retailer and the costs of transportation and distribution of the product. A special technical committee is responsible for determining the appropriate markup. This standardized pricing policy makes operating a pharmacy or a pharmacy retail outlet in areas far from the distribution hubs, which would incur higher distribution costs, less profitable.

Despite all these efforts to increase access to licensed public and private pharmacies and pharmacy retail outlets, a very active informal medicines market operates in Benin. The MoH through the DPM has been engaged in an aggressive information, education, and communication (IEC) campaign to raise awareness of the dangers associated with the purchase and use of medicines from the informal markets. A 2005 survey by the DPM and the Pierre Fabre Foundation of 600 households in Cotonou found that 40 percent of the households admitted to having purchased medicines from the informal market. Because these surveys were limited to Cotonou, the results clearly are not necessarily reflective of the situation in other regions of the country where access to licensed pharmacies and pharmacy retail outlets and access to media are more limited and where access to medicines from across the borders is easy.

## **Availability and Appropriate Use of Pharmaceutical Products**

Availability of essential medicines at CAME and at the health facility level has improved. CAME has identified 40 products on the EML that it considers high-volume products and that it tries to ensure are always available. A 2005 assessment of the availability of key essential medicines and supplies<sup>34</sup> in 40 health centers in four health zones in the country found that 8/10 of the facilities had had no stock-outs of those products in the six months preceding the assessment. The two products most frequently out of stock during this assessment were benzyl penicillin and condoms.<sup>35</sup>

Ensuring appropriate use of medicines remains a challenge. The lack of appropriately trained dispensers at the health facility dispensaries means that the responsibility for counseling patients

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<sup>34</sup> Condoms, amoxicilline, co-trimoxazole, iron fumarate, folic acid, metronidazole, paracetamol, chloroquine, benzyl penicillin,

<sup>35</sup> Sourou Gbangbade, Hounsa Assomption, and Lynne Franco-Miller. 2006. *Benin: Les Effets du Fonds Mondial sur le système de sante. Rapport Provisoire de suivi 2005*. PHR Plus.

on the appropriate use of the medicines they are prescribed falls primarily on the prescriber. The various programs in the MoH have developed disease/condition-specific treatment guidelines (as discussed earlier) to assist prescribers, though these guidelines are distributed only to the public sector health facilities. Hospitals have no drug and therapeutics committees, but each hospital has a technical committee that is responsible for reviewing the prescribing practices at the hospital and recommending changes where needed.

### **Sales/Cost Recovery (Affordability)**

As discussed earlier, cost recovery is an essential element of the health system in Benin. As seen from Table 12, in 2003 the sale of pharmaceuticals was responsible for 71 percent of the cost-recovery funds, while the costs of purchasing the pharmaceuticals was only 39 percent of the total expenditures from all the cost-recovery funds. The sale of pharmaceuticals is thus the primary source of funds for the health facilities and supports their operations. This reliance on pharmaceuticals may explain the reluctance to control the prices of pharmaceuticals sold in the public sector. Additional discussion of the cost-recovery system can be found in the Health Financing section of this report.

**Table 12. Receipts and Expenses of Pharmaceuticals from the Cost-Recovery Funds in 2003 (CFA francs)**

	<b>Medicines and Consumables</b>	<b>All</b>	<b>Percentage</b>
Receipts	3,125,955,087	4,381,841,212	71%
Expenses	1,656,508,006	4,265,128,821	39%

Source: Ministère de la Santé. 2005. *Annuaire des Statistiques Sanitaires 2004*. République du Benin.

### **Conclusions**

The pharmaceutical sector in Benin appears to be relatively well structured; however, the implementation of the laws and policies as they are designed remains problematic.

#### **Strengths**

- Fairly comprehensive pharmaceutical laws, decrees, and policies have been developed and are available in a compiled form.
- An appropriate system is in place for the selection of essential medicines and for the review and development of the EML.
- The public sector procurement procedures are well defined and are consistent with international requirements.
- The procurement agency, CAME, is currently generating sufficient funding to support its day-to-day operations.

- Inventory management tools, including stock cards and stock registries for use in the health facilities, have been developed and disseminated to the health facilities.

### *Weaknesses*

- Human and financial resources capacity are limited at all levels of the health system to enforce the laws and regulations governing the pharmaceutical sector.
- No laws or policies exist for the management of donations of pharmaceutical products, and they are needed to provide guidance on how to handle these products at both the central and peripheral levels.
- The National Drug Quality Control Laboratory does not have the financial, material, and human resources capacity to meet the quality assurance needs of the pharmaceutical sector.
- CAME has insufficient storage capacity, particularly at its central warehouse.
- CAME does not charge a handling fee for managing products it stores at its warehouses on behalf of other programs and donors. This situation could potentially affect its financial health.
- CAME's health information system (HIS) does not collect inventory information, and no separate pharmaceutical management information system exists.
- Capacity at the peripheral level facilities is insufficient to develop appropriate long-term estimates of their pharmaceutical requirements. This lack contributes to the challenges CAME faces in quantifying requirements as part of the procurement process and results in stock-outs of some products.
- The sale of medicines by the informal market remains a major challenge in ensuring rational use of medicines. The emphasis on IEC messages to resolve the problem may not be sufficient to meet this challenge. Increasing access to licensed pharmacies and pharmacy retail outlets is also required.
- No policy regulates the sale of pharmaceutical products in the public sector; therefore, each health facility is free to determine the prices of the products it sells. The sale of pharmaceuticals is the primary source of revenue for the health facilities.

### **Health Information Systems**

An HIS is “a set of components and procedures organized with the objective of generating information which will improve health care management decisions at all levels of the health

system.”<sup>36</sup> It is composed of a number of subsystems, some of which may be integrated or linked. The level of integration of these subsystems generally defines the strength of an HIS system.

The main system that provides information to health planners and policy makers in Benin is called the *Système National d’Information et de Gestion Sanitaire* (National Health Management Information System), which was established by the MoH in 1990. Currently, the system is managed by the Statistics and Documentation Unit of the Directorate of Planning and Forecasting.

The SNIGS conceptual framework mirrors that of the health pyramid. Its general objective is to contribute to the definition, implementation, and monitoring of the national health policy and to provide reliable and pertinent information for planning, management, implementation, monitoring, and evaluation of health interventions at all the levels of the health pyramid. It has the following specific objectives—

At the peripheral level—

- Collect, synthesize, and transmit information to the intermediate level
- Facilitate information feedback, management of resources, and supervision of activities
- Analyze the data to take appropriate action

At the intermediate level—

- Collect, enter, and store in SNIGS health information and information on diverse resources from peripheral health facilities and departmental hospitals
- Facilitate decision making through data processing and analysis
- Ensure feedback of information
- Synthesize and transmit information to the central level

At the central level—

- Define and harmonize data collection and reporting tools and ensure their implementation
- Process and analyze information received from the intermediate and peripheral level

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<sup>36</sup> Islam, M., ed. 2006. *Health Systems Assessment Approach: A How-To Manual*. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20 Project (HS20/20), Partners for Health Reform*plus*, Quality Assurance Project, and Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

- Produce information that allows monitoring and evaluation of progress of major health programs and their effect on the health of the population
- Produce timely information on diseases with greater epidemic risk (cholera, meningitis, yellow fever)
- Ensure establishment of a database combining information on the health of the population and the health system in general
- Produce health information and indicators for monitoring various health resources
- Identify themes for operational research
- Facilitate information feedback to allow all health actors to fit their interventions in a global context

### ***Analysis of the Benin HIS***

Sixteen years after its creation, the Benin main HIS system (SNIGS) is now well established, functional, and useful to users. Its objectives are clear, and implementation mechanisms have been put in place to ensure achievement of those objectives. For example, many tools accompanied by user instructions have been developed to facilitate data collection and are being used at all levels of the health pyramid. Most of the tools and forms are clear and easy to use, and the people who fill out the forms seem to be capable of accomplishing this task. Statisticians in each health zone and health department enter and aggregate the data to be submitted to the central level. Data are generally used at all levels of the health system for planning purposes.

The health statistical report (*Annuaire des Statistiques Sanitaires*), which is the main output of SNIGS and one of the main documents used by health authorities for epidemiological surveillance and planning, is published annually. Feedback of information occurs from the central level to the periphery through the publication and dissemination of the statistical report and the newsletter “Rétro-snigs.” “Rétro-snigs” is published quarterly and contains information on disease trends and patterns. Information feedback also occurs during meetings organized by zonal authorities that bring together representatives of hospitals and health centers at the zone, commune, and arrondissement levels.

The system is capable of collecting and reporting on most of the common international indicators of health status, such as number of hospital beds per 1,000 people, HIV prevalence among pregnant women 15–24 years of age, contraceptive prevalence rate, and MMR reported by national authorities. However, the system does not collect data on HIV prevalence among pregnant women 15–49 years of age or on the proportion of children 5 years of age who are underweight for age.

SNIGS draws its strengths from several evaluations it has undergone over the last 15 years, which have led to many improvements. The system has also benefited from French government support, which unfortunately ended a few years ago. Despite these strengths, the system has a

number of weaknesses that limit its performance. The assessment analyzes these weaknesses by looking at some of the characteristics of a well-performing HIS.

### *Systems Integration and Linkage*

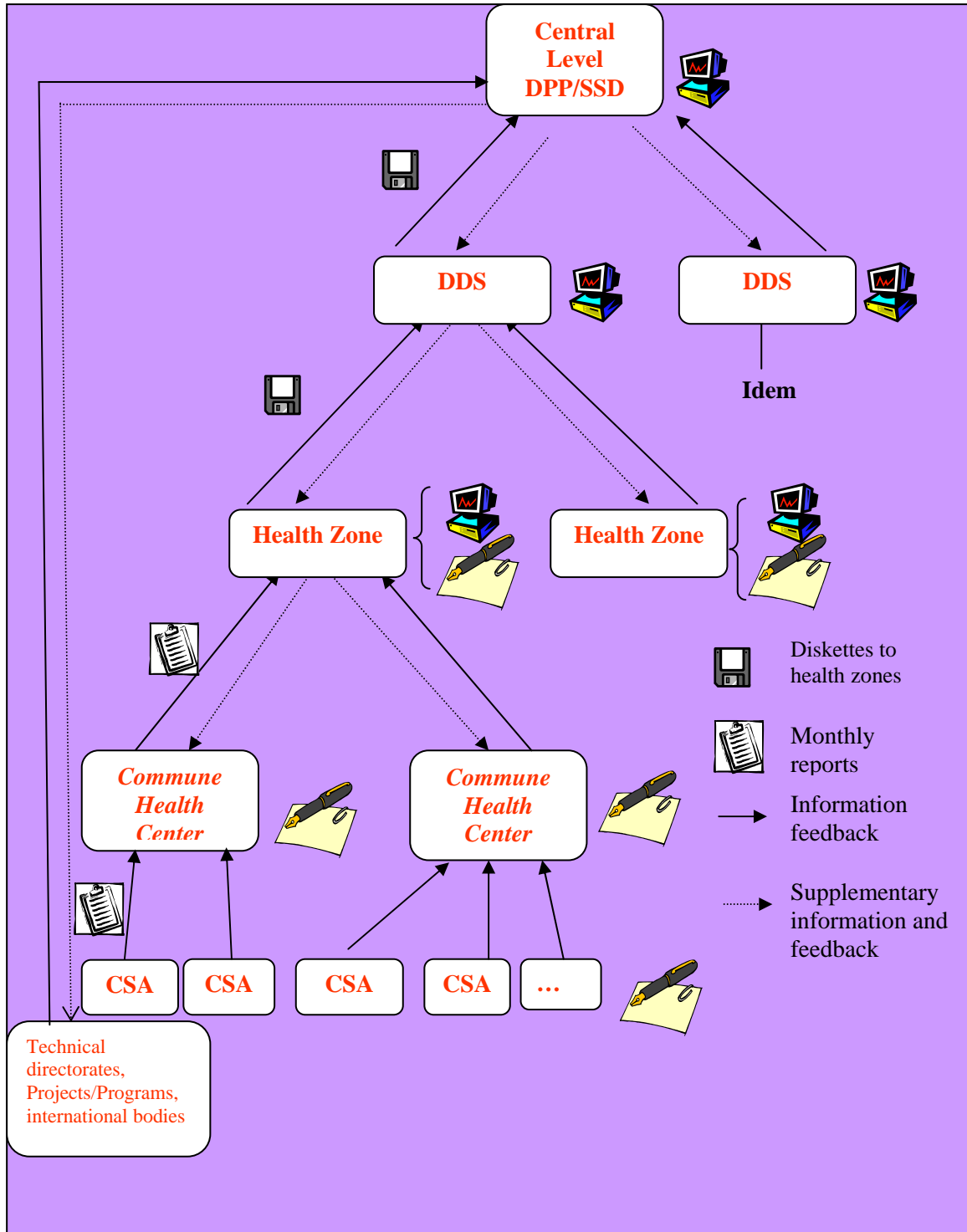
In Benin, many health information subsystems exist, some of which are integrated to or have loose links with SNIGS and others that are completely independent of it. The following represent the range of health information subsystems in Benin—

- Routine epidemiological surveillance subsystem that collects information at the health facility level and provides monthly reports, using tools supplied by SNIGS. Parallel to this system is the *Système Intégré de Surveillance des Maladies et de la Riposte (SIMR, or Integrated Disease Surveillance and Response System)* that collects information on the major transmissible diseases (meningitis, yellow fever, polio, small pox, neonatal tetanus, and cholera) and generates reports on a weekly basis. The SIMR is managed by the Directorate of Health Protection, which uses its own tools to collect the weekly surveillance data. At the end of the year, the SNIGS staff and the SIMR staff meet to compare and validate the surveillance data.
- Routine administrative reporting subsystem that collects information on personnel, medicines, finances, and materials. Administrative information is collected at the health facility level using forms supplied by SNIGS. However, the Directorate of Human Resources collects its own information on personnel, using its own forms. It also has its own database to store those data.
- Maternal and child health reporting subsystem. MCH information is also collected at the health facility level through SNIGS. EPI collects its information through this subsystem. However, the Directorate of Maternal and Child Health collects additional information using its own forms.
- Reporting subsystems for special programs, such as tuberculosis, malaria, and HIV/AIDS control. These programs collect their own data, using their own forms. Some of these data are captured through the SNIGS epidemiological reporting subsystem. The programs can share their reports with the SNIGS, but they are not required to do so.
- Vital registration subsystem for births and deaths. SNIGS collects this information at the facility level, but the information is also collected by the Ministry of the Interior, which shares its reports or specific information with SNIGS upon request.
- Population census data. These data are collected and stored at the National Institute of Statistics and Economic Analysis (INSAE). SNIGS requests reports or specific information from INSAE and extracts the information it needs.
- Population-based surveys and other major surveys that are conducted for research purposes as well as monitoring and evaluation of specific health service delivery programs. These surveys are usually carried out by other ministries and organizations.

SNIGS occasionally requests reports of these surveys, but institutions collecting these data are not required to share it with SNIGS. SNIGS sometimes collaborates with institutions conducting these surveys. For example, SNIGS is involved in the 2006 DHS that is currently being prepared by INSAE. The last DHS was conducted in 2001.

Figure 18 shows the flow of the SNIGS information and the other subsystems that are linked to SNIGS. Information flows from the peripheral level (CSAs and CSCs) to the health zone level and from there is transmitted to the health department level (DDS) and the central level. Feedback of information occurs from the central level to the departmental level and from there to the zonal level. The zonal level ensures that the information that is “returned” is shared at the health center level (CSCs and CSAs).

In addition to the information collected by SNIGS at health facilities and transmitted through the route just described, some technical directorates and programs at the central level of the MoH collect additional information at health facilities to fulfill their reporting needs. This process puts an extra burden on the nurses or midwives who have to produce several reports, sometimes within tight deadlines, while required also to provide quality care to patients. Some directorates collect the same information already collected by SNIGS at different time intervals and using different forms (for example, DHR). This lack of coordination causes duplication of efforts and increases the errors in the data being collected. As a result, SNIGS personnel spend a lot of time reconciling their own data with data collected by these other directorates to ensure they all have the same numbers.



Notes: SSD (Statistics and Documentation Service) is part of the central-level DPP (Directorate of Planning and Forecasting). DDS is the regional administrative body (Health Department Directorate).  
 Source: DPP, Statistics and Documentation Unit.

**Figure 18. SNIGS information flow**



Other subsystems not integrated into SNIGS are those housed elsewhere, such as vital statistics data, population census data, national health accounts analysis, major health surveys (for example, DHS), and data collected at private facilities (except confessional NGOs that report through SNIGS).

The preceding description of SNIGS and other subsystems shows that a variety of health information is collected in Benin. Although SNIGS has the basic information needed for planning and decision making, it does not sufficiently capture health information collected by other subsystems that are not linked to it. Having a complete picture of the health data collected in the country would certainly improve health planning and decision making.

### *Resources, Policies, and Regulations*

SNIGS relies on the MoH budget to cover items such as health information/statistics personnel; data processing and reporting equipment and software; record books, forms, and stationery; instruments and forms for data collection, storage, and reporting; HIS-related training; and operational costs related to data collection and transmission. Until recently, the system was supported by the French Cooperation, but that support has ended and the government budget is too low to support the entire system and allow it to be more efficient. For example, information at peripheral health centers (CSCs and CSAs) is still entered and aggregated manually because of the lack of computers and electricity; not enough nurses or midwives are available both to provide care and to fulfill the SNIGS reporting function (the HIS function is perceived as burden), not enough resources are available to train people in HIS, and frequent movement of personnel constantly requires training of new staff, particularly new recruits who are not familiar with the system.

Moreover, a number of health facilities do not have reporting forms because the DPP does not have enough resources to make forms and guidelines available to all health facilities or send new forms if the original ones are lost or damaged. Furthermore, the lack of an electronic network linking various points of data collection does not allow easy and faster flow of information from one level of SNIGS to another and from SNIGS itself to other subsystems and vice versa.

Currently, no policies, laws, or regulations mandate that private health facilities provide reports of defined services and activities to the HIS. As mentioned earlier, only confessional NGOs provide information to SNIGS according to a Memorandum of Understanding between these NGOs and the MoH. With the new mechanism for collaboration between the public and private sectors, there are hopes that the two sectors will share resources and information.

### *Data Availability and Quality*

The document *Système National d'Information et de Gestion Sanitaire: Guide d'Instructions pour les Outils du SNIGS* provides clear standards and guidelines for data collection and reporting procedures. Two main categories of tools exist: (1) registers, forms, cards, and record books for local use (they contain clinical information, pharmaceutical stocks, and information on MCH services); and (2) reporting forms. The reporting forms can be divided in three categories: (1) financial/management forms (reports on finances, materials, vaccine stocks, and personnel);

(2) clinical forms (epidemiological reports, summary of clinical services); (3) maternal and child health forms (MCH activity reports, child immunization activity reports). Financial, clinical/epidemiological, and MCH reports are submitted monthly from one level to another, reports on materials are submitted semi-annually, and reports on personnel are submitted annually. Epidemiological reports related to major transmissible diseases are submitted weekly to the Directorate of Health Protection through SIMR. They are also submitted to SNIGS monthly as part of the regular epidemiological reporting.

The SNIGS forms have been modified over the years, making data easier to collect. However, some of the people we interviewed had difficulties completing the epidemiological reporting form B5. So far, the rate of transmission of reports to the SNIGS central system has been excellent (more than 97 percent). If the rate is under 97 percent, the SNIGS staff members collect the missing reports from the health facilities at all levels. Timely reporting is monitored by the SNIGS staff, but reports are not always submitted on time. The SNIGS staff members do not have the means to regularly go to the field to get the missing reports, but they manage to have all the information by the end of the year, when they publish the SNIGS health statistical report, *Annuaire des Statistiques Sanitaires*.

Data quality is still a problem because reports are not free from errors. An internal evaluation of SNIGS conducted in 1999 revealed that the proportion of errors in the reports transmitted was not significant. However, considerable errors and distortions existed in some of the epidemiological data (for example, 74 percent of reports on new cases contained errors). The SNIGS staff has since stepped up its efforts to correct and validate all the reported data. They conduct supervision visits during which they check some of the reports submitted, especially if the data do not seem to be reliable. Unfortunately, because of limited resources these visits do not occur regularly during the year and do not cover all the health facilities. However, a general data quality audit is done at the end of the year before the statistical report is published. At that time, all the SNIGS departmental databases are carefully checked after a pre-audit has been done at health facilities, using patient registers and other forms the facilities are supposed to fill out. The SNIGS data are also checked against similar data collected through parallel subsystems (Virtualia system of the DRH, SIMR system of the DNPS) to ensure consistency in the data. Completion and validation of all these data often take a long time, which makes publishing the statistical report on time difficult. The delays in the submission of the SNIGS reports and the publication of the *Annuaire des Statistiques* unfortunately affect planning, because up-to-date, accurate, and timely information are difficult to obtain when they are needed.

Efforts are currently being made at the zonal level to check the quality of the data before they are submitted. However, the insufficient training of personnel in the use of data collection tools (mainly caused by constant movement of personnel) and the lack of these tools in some of the health facilities affect the quality of the data. To remedy this situation, some projects include training in SNIGS data collection and reporting in their activities, as for the PROSAF project in the Borgui/Alibori department.

Health facilities submit four reports a month on average, which is a burden for the nurses and midwives who prepare these reports. Interviews revealed that because they do not have enough time to do their clinical work and prepare the reports, some nurses and midwives often fill out

the forms quickly and do not review their reports before submitting them to the next level. Some of the medical officers also sign off on the reports without doing a quality check.

### *Data Analysis and Use*

The capacity to analyze information at the lower level of the system (CSCs, CSAs) is still limited because of the lack of computers and well-trained personnel in data analysis/statistics. However, at the zone and DDS levels, statisticians analyze the data before sending it to the central level. Data are not disseminated widely enough to make them available to anyone who needs them. Dissemination (or feedback) is usually done through the *Annuaire des Statistiques* and the “Rétro-snigs” newsletter. However, a number of people interviewed at the peripheral level said they either do not get the “Rétro-snigs” newsletter or receive it with delays. Some are not aware of the existence of the *Annuaire des Statistiques*. Also, these publications have not so far been disseminated through the MoH website, which would be one way of reaching a wider audience.

### **Conclusion**

The greatest strength of SNIGS is its functionality. The system is well conceptualized and up and running, and it has proven to be an important tool for planning, management, and decision making. The main weaknesses of the system are the following—

- Insufficient integration or linkage of the various health information systems, which makes getting a clear and comprehensive picture of health data that are produced in the country difficult
- Lack of coordination in data collection among the SNIGS unit and some technical directorates, which creates duplication of efforts and increases the data collection burden at the health facility level
- Insufficient capacity (computers, electricity) and training of health facility staff to collect, analyze, and report data
- Inadequate resources for frequent supervision and data quality checks
- Lack of law or regulation mandating private sector facilities to provide information to SNIGS
- Inability of SNIGS to provide complete and up-to-date information when needed for planning purposes (because of delays in submission of reports and publication of the SNIGS statistics, and lack of health information on the private sector, except confessional NGOs)
- Limited dissemination and use of the statistical report and “Rétro-snigs” newsletter

The major threat to the system is the lack of a strong financial support base. The only source of support comes from government, and it is not sufficient and will unlikely increase because of

other major health priorities. In addition to government support, the system needs other sources of support to continue to provide relevant, reliable, and up-to-date information to health policy makers and other health information users.

The SNIGS statistics are used not only by the government but also by donors who support the health sector in Benin. The new government health strategy that is being developed should be an opportunity to advocate for support from donors who also rely on SNIGS data for justifying and planning their projects.

### *Options for Overcoming Weaknesses and Threats*

Annex 1 summarizes some of the options that can be considered to improve SNIGS's performance. Because the identified weaknesses cannot be addressed without increased support (financial and/or material), the main option would be to require a budget line item for HIS in each donor-funded project or program. Also, the MoH needs to increase its budget allocation to HIS.

## **Private Sector Engagement**

This section discusses the overall climate for private sector activity in Benin and the size and scope of private sector participation in health. It identifies initiatives already under way to enhance private sector engagement in health and suggests additional opportunities for consideration. Although Benin's overall business climate is challenging, the health sector has a wide variety of private sector actors who are actual and potential allies for improving the health system. The main challenge for the government is to mobilize these private actors in ways that enhance their contributions to improving public health. To do so most effectively, the government probably needs to identify shared interests and rely on influence, moral suasion, and positive incentives more than on direct regulatory measures.

## **Analysis**

### *General Business Environment and Investment Climate*

The overall business environment in Benin is quite challenging. Benin ranks 114 of 117 countries in the World Economic Forum 2004 growth competitive index. This index measures a broad range of factors affecting an economy's business environment that are key determinants of sustained economic growth. In its "Ease of Doing Business" index in 2004, the World Bank ranked Benin 129 among 155 countries. Benin does not have a well-diversified economy, and the industrial sector in particular is underdeveloped. Services and agriculture together account for 85 percent of all economic activity. Formal sector employment is low, and tax collection remains challenging.

The broad business community can be an important ally to support the health system and help bring about changes that will lead to increased service coverage, better worker health, and a more competitive economy. Several institutions foster and strengthen private enterprise. The

Ministry of Industry, Commerce and Employment Promotion oversees commercial activity. The Chamber of Commerce provides a ready venue for interactions between the government and the private sector. The National Employers Council (Conseil National du Patronat du Bénin) represents the interests of the business sector. CEPEPE (the Center for the Promotion of and Guidance to Small and Medium Enterprises) helps entrepreneurs, business people, and national and foreign investors develop feasible business projects, obtain financing, and obtain advisory services. PromoBenin brokers trade and investment partnerships between Beninese companies and foreign partners. The Benin Entrepreneurship Foundation (Fondation de l'Entrepreneurship du Bénin) provides donor support to small and medium enterprises.

Benin is served by an active banking sector, with branches of ECOBANK, Continental Bank-Benin, the Société Générale de Banques au Bénin, the Bank of Africa, and the Banque Internationale du Bénin, among others. Benin is also served by an established consulting sector, with local firms and at least one firm associated with a large international consulting firm. For a better understanding of the health system, knowing more about how the private health sector engages with the broader business community and whether it can readily obtain banking and advisory services as needed would be helpful.

### *Size and Composition of the Private Sector in Health*

Benin's private sector is quite diverse and includes offices of nurses, physicians, dentists, and midwives; for-profit hospitals and religious nonprofit hospitals; pharmacies, laboratories, suppliers of medical equipment, and pharmaceutical wholesalers; traditional practitioners; private voluntary health insurance companies, mutual health insurance organizations, and large businesses that provide infirmaries and other health services for their employees; consumer defense leagues; and NGOs. Benin's robust independent press can also be considered an important private sector actor in health.

### *Private Physician, Dentist, and Midwife Practices*

Before 1986, essentially all health professionals were hired by the state after completing their training. When the government of Benin stopped automatically recruiting all new health professionals, newly trained health professionals began to develop professional opportunities in the private sector. This occurred on an ad hoc basis until 1997, when Law 1997-020 authorized the private practice of medicine and established requirements and procedures.

The MoH now has a well-defined process for authorizing the private practice of medicine. Individuals present their requests to the Ministry's National Directorate for Protection in Health. The DNPS convenes a Technical Commission composed of MoH directors and representatives of professional boards, associations, and unions to review the requests. The respective professional board conducts a physical verification of the proposed service delivery site and makes its recommendation. The Technical Commission generally follows the recommendation of the professional board. Although health professionals who work in the public sector are legally prohibited from working in the private sector, this practice appears relatively common. The Ministry of the Interior, Security and Decentralization also registers private practitioners in health, although the specifics of this process are not known to the authors.

Although in principle the government of Benin has well-established procedures for authorizing private medical practice, in fact, many physicians and others practice in the private sector without MoH authorization or knowledge. This situation is illustrated by a 2005 survey of private practitioners that the DNPS carried out in four departments (Borgou, Alibori, Mono, and Couffo). Of 231 private health practices surveyed, only 28 (12 percent) were authorized. The lack of authorization of private practitioners creates a number of problems. First, it prevents the MoH from ensuring and monitoring the production or quality of services by these providers. Second, practitioners practicing without authorization are unlikely to collaborate readily with the ministry to address public health concerns. Third, the relationships that unauthorized practitioners develop with their clients and local officials create difficulty for the MoH in stopping them from practicing even when they do not meet technical standards of quality. Benin has an estimated 1,500 physicians (of whom 571 are members of the Board of Physicians), 230 pharmacists (all of whom are members of the Board of Pharmacists), and more than 3,000 midwives (of whom 580 are registered with the Board of Midwives).

### Preponderance of Nursing Practices

The 2005 DNPS survey of private health practitioners also provides a partial picture of the composition of the private sector in health service delivery. Of 231 private practices identified, the overwhelming majority (74 percent) were either nursing practices or nursing practices that perform normal deliveries. (The nursing practices with normal deliveries are likely to be midwifery practices.) Physician practices accounted for less than 6 percent of the total. Only 3 of the 231 practitioners were dentists, and only 1 was a medical laboratory. One important qualifier to these findings is that the survey did not include pharmacists or traditional practitioners. In 2003, another MoH survey in four other departments (Zou, Collines, Donga, and Atacora) included traditional practitioners and found that they accounted for 8 percent of private sector providers. As in 2005, the 2003 survey similarly found that nursing practices and nursing practices with normal deliveries accounted for 71 percent of all private health facilities surveyed.

These results suggest the nursing and midwifery professions are likely providing a large share of private sector health care, particularly in rural areas. These results are important because Ministry of Health tracking of private sector activity in health through SNIGS is currently not focused on the activities of nursing and midwifery practices. The survey results suggest a need to increase information on the nature and volume of services provided by nursing and midwifery clinics. They suggest that efforts to enhance private sector engagement in health need to proactively seek the participation of nurses and midwives. The MoH may also wish to focus greater attention on authorization of private practice by nurses. Nurses and midwives practicing individually are likely to face challenges of continuing education and access to specialized skills for treating unfamiliar or complicated cases.

### Private Hospitals

According to Benin's March 2006 provisional report from the national health accounts for 2003, spending in private clinics and hospitals accounts for 7 percent of total health spending. This figure compares with MoH hospitals, which account for 18 percent of total health spending (or

all public hospitals, including those of other ministries, which account for 19 percent of total health spending).

### Religious Nonprofit Hospitals

Religious nonprofit hospitals are well integrated into Benin's health system and make important contributions to overall zonal hospital service production. Eleven religious nonprofit hospitals operate as zonal hospitals and provide statistics to the Ministry of Health. Through these statistics, the average occupancy rates and lengths of stay can be compared between zonal hospitals that are private religious hospitals and those that are public and operated by the MoH. This comparison (Table 13) reveals that the religious zonal hospitals have much higher production of services than the public zonal hospitals. The 1,109 hospital beds in the religious hospitals have an average stay of 6.3 days and an average occupancy rate of 81 percent, which contrasts to the 1,054 hospital beds in public zonal hospitals with average stays of 2.9 days and 23 percent occupancy rates. The religious zonal hospitals with half the total zonal hospital beds provide 63 percent of all zonal hospitalizations and 79 percent of all zonal hospital inpatient days. Although the total cost of providing these hospital stays is not known, the 2003 national health accounts indicate that all private hospitals account for only 7 percent of total health spending. Thus, the high contribution by religious hospitals to the overall production of services comes at a low cost.

**Table 13. Zonal Hospital Service Production**

	Beds	Hospitalizations	Hospital Days	Average Stay (Days)	Occupancy Rate
All zonal hospitals	2,163	82,945	415,855	5.0	53%
Religious zonal hospitals <sup>a</sup>	1,109 (51%)	52,073 (63%)	327,799 (79%)	6.3	81%
Public zonal hospitals <sup>b</sup>	1,054 (49%)	30,872 (37%)	88,056 (21%)	2.9	23%

Source: Ministère de Santé Publique. 2005. *Annuaire des Statistiques Sanitaires 2004*. République de Bénin.

<sup>a</sup> Information for 10/11 religious zonal hospitals.

<sup>b</sup> Information for 19/20 public hospitals.

### Pharmacies and Pharmaceutical Wholesalers

Please see Pharmaceutical Management section for in-depth treatment of these subjects.

### Laboratories

Laboratories appear to be a weak link in private health care delivery. Informants comment on their scarcity, and the 2003 and 2005 private health surveys in eight departments (that did not include the country's largest urban areas) registered only three private laboratories of a total of 490 private health care providers. This finding suggests that private providers either deliver health care without the aid of laboratory services or send patients to public facilities for

laboratory work. Neither of those scenarios is desirable. If private providers forgo laboratory services, the quality of care suffers. If they send patients to public laboratories, the public laboratories may not fulfill their primary function of supporting public sector service delivery.

### Traditional Practitioners

The size and scope of the traditional medicine sector is not fully known. Informants indicate that a very high share of Benin's people seek traditional care before turning to allopathic medicine. Psychiatry is one field where traditional practitioners appear to complement allopathic medicine effectively. Allopathic physicians also incorporate some elements of traditional medicine into their own practices. In the 2003 MoH survey of private health care providers in four departments, traditional practitioners accounted for 8 percent of all providers. Although the 2006 national health accounts exercise did not quantify health spending on traditional medicine, informal expenditure information provided by one traditional practitioner suggests that revenue streams from traditional practice can be quite high. Benin plans to set up a professional board for traditional practitioners similar to those for physicians, midwives, and pharmacists. The Ministry of Health is undertaking an evaluation to increase understanding of the size and scope of activity of traditional practitioners, and results are expected in May 2006.

Further information on the size and scope of traditional practices and the level of health spending they control will be valuable for determining how best to engage them in achieving public health priorities. The establishment of a formal board for traditional practitioners will likely contribute both to increasing awareness of their activities and to providing the Ministry of Health with a channel for engaging with them more effectively. If traditional practitioners are the first point of contact many people have with health care, bringing those practitioners into the health care referral system is important, particularly so that they can identify and ensure effective treatment for urgent problems, such as severe malaria.

### Private Voluntary Insurance Companies

A number of private companies offer voluntary health insurance packages, largely serving formally employed workers and their families, often in urban areas. One private health insurance company covers an estimated 10,000 people. Interviews with private employers indicate that insurance firms readily participate in competitive selection processes. Interviews with human resources managers indicate that the level of firm and worker satisfaction with the insurance companies' offerings can be quite high. Insurance companies contract with both public and private providers. Insured users make copayments directly to service providers at the time of care, and their insurance companies reimburse the providers for the remaining fees.

Insurance companies find it difficult to control costs and to combat fraud. Subscribers and providers do not have the same interests as insurers in controlling costs and fraud. Some providers charge insurers more than they charge patients directly because they factor in financing costs of delayed payments and the costs of completing administrative requirements. Also, some providers consider that the price they charge direct patients is discounted to account for their inability to pay. Insurers think they should pay lower costs than direct patients because they are reliable bulk purchasers. Because insurance companies do not reimburse providers on a case



basis, such as the Diagnosis-Related Group used in the United States, providers do not share insurers' interests in reducing costs. Insurers observe that nonsubscribers fraudulently use insurance and that providers are sometimes complicit. Insurers would like to engage more actively with the public sector in the development and implementation of health policy.

### Mutual Health Organizations

The mutual health organization (MHO) movement is small but growing rapidly in Benin. From 11 MHOs registered in 1997, Benin had 90 mutual health organizations by 2003. Of these, two-thirds were operational and the remaining one-third were either starting up or projected. If the growth rate from 1997 to 2003 has continued to the present, Benin likely had about 120 MHOs by 2006. Information on the number of people covered by these MHOs is not readily available, but on the basis of experience in other countries, MHOs are likely to cover fewer than 100,000 people in Benin to date.

The government of Benin and its development partners share the assessment that MHOs hold great promise for Benin. This assessment is reflected both in the attention that the MoH has afforded them in the development of a draft MHO policy and in the many development partners that support the development of MHOs. This enthusiastic support for MHOs likely stems from a desire to increase coverage, use, and quality of health care in a context where government revenues do not fully finance care, many people lack cash to pay user's fees, the Indigent Fund does not fully overcome financial barriers, and individual users lack the clout to insist on high-quality care.

The MoH's DNPS has prepared a draft MHO policy and strategy for MHO development that calls for a law to provide MHOs with a legal framework as well as a number of incentives to strengthen and grow the MHO movement, including financial support to MHOs, mechanisms to channel support for indigent care through MHOs, and financial incentives for the health facilities and workers that provide care to MHO members. Development partners supporting the MHO movement include the International Labour Organization's STEP program, UNICEF, Belgium, Canada, Germany, the United States, and the Scandinavian NGO *Borne Fonden*.

### Employers

Employers in Benin contribute to health by contributing to the Benin Social Security Fund and by providing on-site health care to their workers. Large employers in Benin are legally required to operate infirmaries for their employees. These infirmaries are staffed by nurses who have formed an association, ABIIST (Beninese Association of Nurses in Occupational Health). This association of 70 nurses in 30 large businesses reaches 25,000 employees and their families and likely can reach many more in the communities where these workers live. ABIIST could potentially help the Ministry of Health to promote public health measures, such as the use of insecticide-treated bednets among formal sector workers, their families, and their communities. The authors met with one ABIIST member who took personal initiative to obtain 400 insecticide-treated bednets for workers in her company and their families from the MoH. This nurse noted that worker absences caused by malaria had declined since the introduction of these bednets. Some employers complement their contributions to the Benin Social Security Fund with

private health insurance for their employees and their family members. Some companies maintain ambulances as well.

Private sector employers represent a potentially important and probably underexploited resource in Benin's private health sector. The MoH could engage proactively with them in ways that would be mutually beneficial, such as providing access to information and supplies to promote healthy behaviors among workers and their communities, providing occupational health nurses with access to continuing education, obtaining information on the production of health services in infirmaries, and leveraging resources such as company ambulances to meet public needs in crisis situations.

### *Consumer Defense Organizations*

Benin has a Consumer Defense League that was founded in 1998. It plays an active role in defending consumer rights. In food safety, the league has participated at the global level in the development of worldwide food safety guidelines with WHO, the UN Food and Agriculture Organization, and Safe Food International. The league may be an untapped resource for improving accountability of the health system to the population.

## **Conclusions**

### *Strengths*

- The private sector is diverse and dynamic. It includes medical offices, clinics, for-profit hospitals, and religious not-for-profit hospitals and clinics. This extensive installed capacity helps the MoH achieve its public health objectives. Private health facilities follow MoH norms and standards of care. Religious hospitals that are authorized as zonal hospitals provide MoH with monthly statistics on production of health services and receive periodic MoH supervision.
- The MoH recently established a *Cadre de Concertation Secteur Publique/Secteur Privé* and an *Organe Paritaire de Partenariat*. These organizations are seen as positive developments by people in both the public and private sectors.
- The MoH has a system for providing authorization for health professionals to operate in the private sector and for opening health facilities (medical offices, midwife practices, clinics, hospitals, and pharmacies). This system is jointly implemented by a team of public and private sector representatives.
- Health workers do not expect guaranteed employment by the MoH after being trained. Private sector employment opportunities relieve the MoH of the financial pressure of employing all graduating physicians, nurses, and so on.
- Formal arrangements are in place to address malpractice, both within the *Ordre des Médecins* and through the judicial system.

- The MoH has European Union support to conduct a census of private sector professionals and facilities.

### *Weaknesses*

- Benin has a significant number of unauthorized practitioners and unlicensed facilities. The MoH does not yet have a clear picture of the private sector. The Government of Benin faces difficulties in enforcing its regulations on private practice. In an environment where access to care is already limited, the government may even face public opposition to closing unauthorized health care providers, particularly when these unauthorized providers are perceived favorably by the communities where they work. No continuing education is required of health professionals, and limited opportunities exist for continuing education. No relicensing is required for ongoing operation of health facilities.
- Private sector actors (insurers, practitioners, clinics, and hospitals) feel that the MoH could do more to engage them fully, which includes bringing them into the definition of health policies. They think this need is particularly true for the implementation of priority programs, where they do not consider they have been fully engaged by the MoH. The MoH does not transfer resources to private sector actors to help accomplish public health objectives (for example, vaccination coverage, insecticide-treated net distribution, care for the indigent).
- The Consumer Defense League does not appear to be actively engaged in influencing health service delivery policy or in addressing consumer problems with health care providers.

### *Opportunities*

- The public sector recognizes that it needs to mobilize the capacity of the private sector to reach the population. MoH officials realize they must work with the private sector to accomplish public health objectives.
- Private sector actors are open to working more closely with the public sector. They are favorably disposed to work with the MoH through the newly established *Cadre de Concertation* and the *Organe Paritaire*.
- The 8th European Development Funds project (8ème Fonds européens de développement) is providing support to strengthen public-private collaboration in health.

### *Threats*

If the private sector is strong and the state's capacity to regulate it is weak, this situation is likely to lead to a distortion of priorities in the health system. The focus is likely to shift from achieving the greatest public health impact and instead concentrate on health interventions that are more profitable or those that respond to the needs of higher-income people (for example, high-technology scanning equipment instead of basic maternity services). Overall effectiveness and equity of health spending are likely to decline.

## **Summary of Strengths and Weaknesses of Benin's Health System**

As summarized in the framework for the health system assessment approach included in Section 1 of this report (Figure 1) the analysis of each module (health system element) allows an assessment of the health system based on the five performance criteria: equity, access, quality, efficiency, and sustainability. Table 14 summarizes the contribution of each of the health system elements to its performance. Using this analysis and the preceding discussion of each system element in this chapter, the assessment team has identified several strengths and weaknesses of the health system.

In summary, Benin's health system appears to have been reasonably well designed, with all the relevant laws and policies in place, but the application of this design across all the elements assessed remains the main weakness of the system and affects its performance.

### ***Summary of Health System Strengths***

Benin appears to be appropriately positioned to have a functional health system that provides affordable and appropriate health care to all its residents.

- The key design elements of the health system appear to be in place, and the movement toward a decentralized system is ongoing with structures in place to ensure local participation in the governance of the health system.
- The laws and policies that form the foundation of an effective health system have been developed and are reviewed, evaluated, and updated on a regular basis.
- A bottom-up, program-based financial planning system is in place that retains user fees at the service delivery level.
- A functional health information system provides information used for planning, management, and decision making.
- Geographic access to health care is quite high, with 86 percent of the population living within 5 kilometers of a health facility.
- A functional public sector pharmaceutical agency manages the procurement of most of the pharmaceutical products for the public sector health facilities and for some private sector facilities.
- The private sector is diverse and dynamic, and recently established private-public partnership organs have been set up to encourage its interaction with the MoH.

### ***Summary of Health System Weaknesses***

Although the structures and the design of the health system appear to be in place, several weaknesses remain, particularly in relation to the implementation of the health system as

designed, that together result in the inability of the health system to provide the desired quality of care to all sectors of the population.

- Enforcement of the existing laws and regulations is weak and ineffective.
- The community-level management bodies do not have the required technical capacity to adequately fulfill their planning and financial oversight role as envisaged by the designers of the health system.
- High out-of-pocket spending in the form of user fees and pharmaceutical purchases, together with the limited government funding of health care, limits access to health care for all.
- Although geographic access is theoretically high, not all the health facilities are functional because of poor infrastructure, inadequate staffing, or insufficient equipment.
- Currently, management of human resources is poor as a whole, with no strategic plan for the management of the human resources in the public sector and no career or performance management of public sector personnel. Health personnel working in the public sector are critically lacking, and the existing health personnel are unequally distributed, with poor coverage, particularly in the rural areas.
- Quantification of pharmaceutical products and distribution of purchased pharmaceuticals are the responsibility of the health facility; however, human resources and financial capacity are insufficient at those levels to adequately fulfill these roles.
- A significant number of unauthorized private sector medical practitioners and unlicensed health facilities exist, and not all private sector stakeholders feel that the MoH has fully engaged them in implementation of the relevant health policies.

Most of the weaknesses that exist in the health system in Benin are interrelated and revolve around three main areas: governance challenges, human resources incentives challenges, and financial challenges.

### *Governance Challenges*

The effective implementation of the various laws and policies remains one of the key challenges of the health system in Benin. The perception exists of a general disrespect of the laws and limited enforcement capacity to ensure compliance. This perception affects all the other sectors of the health system. The nonapplication of the laws and policies relating to recruitment, hiring, transfer, discipline, and promotions adversely affects the management of human resources within the public sector. The nonapplication of the laws and regulations governing private sector health providers means that a significant number of unauthorized private practitioners and unlicensed health facilities exist, and a large and nonregulated informal pharmaceutical sales market exists.

### *Human Resources Incentives Challenges*

General awareness exists that human resources is a critical component of the health system and that a shortage or the poor use of the human resources affects all sectors of the health care system. Incentives and disincentives in the system encourage or discourage the desired behavior of personnel, including their choice of specialty (most physicians prefer to specialize in public health because of the perception that better career options are available for public health physicians) or their choice of work location (few personnel are willing to work in the northern part of the country and few incentives are in place to encourage them to do so).

### *Financial Challenges*

Government expenditure on health care has not kept pace with other sectors or with other countries with the same socioeconomic profile. The financing of the health sector depends on out-of-pocket household expenditure, mainly in the form of user fees drawn primarily from the purchase of medicines and other pharmaceutical products. Given the high level of poverty in the country, this reliance on household expenditure creates a barrier to access to health care and is not sufficient to meet the financial resource requirements of the health system.

The limited financial resources available affect all the other components of the health system, particularly those that require large ongoing financial commitment or those requiring additional capital investments for improvement. Improvement of the pharmaceutical management system requires additional financial resources to increase warehouse capacity at CAME and its regional depots, and to purchase the additional equipment and consumables required to improve the functioning of the national drug quality control laboratory. Improvement of the HIS requires additional resources to purchase and install additional computers and integrate the various HIS subsystems in the main system, and to increase the supervision and data quality checks. Improvement of health service delivery requires additional resources to improve the communication challenges faced by the health facilities and to improve the referral and counter-referral systems. Improvement of human resources management requires additional resources to hire additional personnel, improve the benefits available to staff members, develop financial incentive packages to encourage deployment of staff to less-favorable regions, and develop and implement training courses to maintain the knowledge and capacity of personnel to carry out the requirements of their positions.

Improving health system performance in Benin requires focusing attention on developing interventions to address these three challenges—without which it may not be possible to achieve an appreciable change in the performance of the health system. The next section of this report presents some suggested options of potential interventions to address these challenges.

**Table 14. Summary of Health System Performance**

Systems Elements	Health Systems Performance Criteria				
	Equity	Access	Efficiency	Quality	Sustainability
<b>Stewardship/ Governance</b>	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.		
<b>Financing</b>	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.
<b>Service delivery</b>	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.
<b>Human resources management</b>	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.

Systems Elements	Health Systems Performance Criteria				
	Equity	Access	Efficiency	Quality	Sustainability
<b>Pharmaceutical management</b>	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.
<b>Health information systems</b>	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.
<b>Private sector</b>	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.



## SECTION 5: PRIORITY INTERVENTIONS FOR CONSIDERATION AND ACTION

To improve the functioning of the health system in Benin, the assessment team identified two types of options for intervention: (1) options that are not limited to a single element of the health system or are of major consequence to overall health systems functioning, and (2) those that are adjustments to the design and implementation of a specific health system element. The first group of options is considered more essential in improving the health system and thus is the focus of this section. All the system-specific options for intervention are included in Annex 1.

The options presented for consideration here are not full, detailed recommendations. They are merely options to explore and determine what would work best in this environment and in alignment with other initiatives that are in process or planned by the government.

### Possible Options for Strengthening Health System Governance

Effective health system governance means competently directing health system resources and performance and stakeholder participation toward the goal of saving lives and doing so in ways that are open, transparent, accountable, equitable, and responsive to the needs of the people. To improve the governance of the health system, the assessment proposes examination of the following options—

- *Strengthen transparency and accountability:* The public needs to be able to observe how policy decisions are made, resources invested, and activities carried out. Health system actors perform better when they know that all stakeholders, including the public, can scrutinize their actions. Strengthen the mechanisms for transparency and accountability that civil society has at its disposal to improve governance—
  - Strengthen the COGECSs through training and other actions to effectively play their oversight role, demanding accountability and responsiveness from the health facilities.
  - Conduct information campaigns that will foster not only closer collaboration but also accountability.
  - Strengthen the Consumer Defense League and other consumer associations specialized in health or generic drugs promotion, such as ARAMBE KAFU ATA, to define consumer rights in health.
  - Create a safe environment for reporting cases of corruption, abuse, mismanagement, lack of compliance with work rules and norms, impunity, and the like.
- *Apply effective sanctions:* Strengthen the role of the Inspector General so that she or he has more independent enforcement authority and motivation to use it so that an effective mechanism exists to ensure compliance with laws, decrees, and regulations.

- *Ensure that everyone is aware of the rules and regulations:* Review and synthesize existing health laws and regulations into a summary document, and disseminate it widely to all public sector health staff and to health professionals working in the private sector; publicize these laws on the mass media so that the population is also aware of what practices are acceptable.
- *Broaden societal engagement in health care delivery:* Without broad societal engagement, health systems develop in ways that do not reflect the desires or incorporate the creativity of all possible stakeholders. Search to engage a broader range of actors in the health system: broaden the concept of “private sector” beyond just providers of care to include others who are concerned with health systems performance (for example, insurance companies, private companies who provide insurance coverage for their employees, the press).

These options, or others that would achieve the same results, are critical for ensuring that the health system is capable of using the resources at its disposal to meet the needs of the population to achieve performance in terms of equity, efficiency, quality, and sustainability.

### **Possible Options for Improving Incentives for Health System Performance and Management of Human Resources for Health**

The current system of input-based financing, which provides resources but does not actually require specific results, does not create effective incentives for health staff members to use these resources to achieve desired performance. Improving health system performance requires that competent human resources are available and willing to carry out the work required. But the human resources issues require more than planning numbers and distribution. What is needed is a shifting of incentives toward a more equitable, efficient, and effective use of human resources in alignment with health systems objectives, as follows—

- *Create a system of contractual resource transfers that include accountability for specific sets of results in line with the health system’s goals:* These resource transfers can be in the form of “contracting in” between the MoH and public health facilities through the health zone or “contracting out” with private facilities. Performance-based financing at this level creates incentives, not at individual level but at team or facility level, for results. Such a system would require thorough exploration of the current environment and experiences of other countries, and probably also testing of performance-based financing in Benin before full scale-up.
- *Create explicit positive and negative incentives that would incite health staff toward desired behaviors:* In addition to contracting mechanisms, other incentives can be put in place to motivate workers to take up posts in the periphery, as well as negative incentives if they do not. This intervention would also require implementation of sanctions related to inappropriate health worker behavior: ensure systematic application of Division of

Inspection and Internal Verification proposed sanctions, decentralize authority to sanction, reinvigorate systems of audit and monitoring.

- *Strengthen the definition of service delivery organization:* Creating positive and negative incentives for behavior and performance will require a more explicit definition of “good service delivery organization,” as well as a definition of standards for what should be done at a health facility and how it should be staffed to do so. This intervention would include a clear vision of what happens at point of service—including integration and continuity, meeting felt needs, so that priorities at the local level match the real needs of the population. Several effective examples exist in specific health zones and departments where effective models for service delivery at the zonal level<sup>37</sup> have been implemented. These should be reviewed and incorporated in the MoH’s new national health policy and strategy. Costing of this service delivery organization may also be needed so that health financing needs can be clearly outlined (see Possible Options for Improving Health Financing in next section).

These options, or others like them, are critical to ensuring equity, access, efficiency, and quality of care.

### **Possible Options for Improving Health Financing**

Improved systems performance needs to address the issues of financial accessibility and of adequate resource availability. The poor still have problems of access, and many of the system’s elements need additional resources to function optimally as they were designed. The assessment team proposes the following areas for exploration—

- *Increasing access for the poor:* The Indigent Fund is a good start toward addressing the issue, but searching for other ways to use those funds has significant merit, including using them to pay MHO premiums for the poor and allowing private facilities to be able to access those funds when treating poor patients. Other ways of increasing access for the poor would be removing user fees for some priority services (such as caesarean and assisted deliveries). This intervention could be done in areas of extreme poverty or overall, after an analysis of the actual costs and funding options.
- *Increase efficiency in resource use in the health sector:* Exploring ways to allocate resources based on high-priority criteria, such as population, poverty, local revenue collection capacity, urban/rural balance, or special needs, is worthwhile. Another area for exploration is the possibility of redirecting the huge out-of-pocket expenditures on medicines so that these resources are used more efficiently. This intervention would require further study to understand where those resources are currently going.
- *Increase resources available to the sector:* Even with increased efficiencies, a need remains for sustainable increase in funding for the health sector. Several possibilities

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<sup>37</sup> These examples include work done in zones that have received external support and thus have been able to function and test new ways of organizing and working.

exist: increasing the government budget share allocated to health directly or using special directed taxes to generate funds for health, such as sin taxes (on cigarettes, alcohol, and so forth). Benin has just been forgiven additional debt from the World Bank—ensuring that some of this funding is used in health would be beneficial.

These options for health financing are critical for ensuring equity, access, efficiency, quality, and sustainability.

This assessment of the health system in Benin has come at an opportune moment to build on the current opportunities for change: a new government has expressed its interest in a more fair and efficient State and the development of a new health policy and strategy statement. The analysis of the health system showed a number of strengths, some weaknesses, and several threats to truly improving performance in a sustainable manner. Benin has made many achievements and, compared with many other countries in Africa, has a fairly well-designed system in place. Its performance, however, is not adequate for the level of design and even resources available. The assessment team urges the Government of Benin, in general, and the Ministry of Health, in particular, to use the opportunities of transition to grapple directly with the current threats to the health system's performance to effectively address the health needs and expectations of the population of Benin.

**Table 15. Analysis of Proposed Interventions**

Proposed Intervention	Likely Health Effect	Feasibility	Implementation Speed	Cost
<b>Strengthening the definition of service delivery organization</b>				
Clarify operational definition of what should be done at a health facility and how it should be staffed to do so (vision of what happens at point of service, including integration and continuity, meeting felt needs, etc.)	Improve efficiency and effectiveness of health care services	Some of this work is already done, so it can serve as base; need to engage stakeholders in discussions	1–2 years	Low
<b>Strengthening governance</b>				
Technical support to strengthen capacity of COGECSSs to play their oversight role more effectively (for accountability and responsiveness)	Moderate–High	High: Requires the identification of partners to support the sensitization and training	2–5 years depending on resource availability	High because many COGECSSs
Help strengthen Consumer Defense League’s capacity to defend consumer rights in health	Moderate: Stronger civil society watchdog function could substitute for state regulatory activity	High: Basis in existing league, mostly requires strengthening this organization; robust press can also support this intervention	High: Relatively quick to start up; depends on uptake by civil society groups	Low
Inspector General position should have independent enforcement authority and motivation to use it	Moderate: This intervention will improve compliance with applicable laws and regulations	Low–Moderate: Will require a change in the law and the political will to do so	At least one year	Low: Most of these costs are associated with the process of changing the laws
Put in place mechanisms to combat clientelism, corruption, violation of work rules and regulations, and culture of impunity in the workplace; e.g., decentralize the Division of Inspection and Internal Verification function and ensure collaboration with law enforcement authorities	This intervention is a prerequisite for all other options and will likely affect all areas if done	Requires strong government will/commitment	2–5 years	Low
Create safe environment/mechanism for reporting of corruption and other law violations				

<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
Review and synthesize the existing health laws and regulations to develop a summary document that would be easier to disseminate and read for busy health professionals and the population (relevant laws would need to be translated into local language)	Moderate	Moderate	At least one year	Moderate–High: Includes costs of sensitizing providers to the laws
<b><i>Align incentives in health system toward health systems goals</i></b>				
Make MoH resource transfers contractual among levels (center to department to zone to facility) with accountability for specific set of results	High: Could improve efficiency, quality, access, institutional sustainability	Low to moderate: Those who receive resources without accountability for results may be reluctant to be held to more rigorous standards; would need conceptual work and significant discussion with stakeholders (including unions), as well as testing	Moderate: Would require legal and operational arrangements; would require sensitization; may take 5–8 years to function well	Not that expensive to implement but requires investment in capacity building to run
Put in place strong incentives to motivate personnel to work in rural/remote areas (special bonuses, loans, vehicles, scholarships, promotions, retirement benefit packages, nonmonetary incentives, such as congratulation/thank you notes, public recognition programs)	Increased worker moral and productivity; increased access, quality and use of health services	Requires strong government commitment	2–5 years	High
Provide private facilities with predictable access to finance, equipment, and supplies on contractual basis in exchange for defined results in priority programs and in provision of care for indigent	Moderate to high: Depends on analysis of additional coverage these facilities could achieve	Moderate to high: Likely support from private facilities but public sector actors may see as competition for scarce resources and object	Moderate	High: Transfers to private facilities

*Section 5: Priority Interventions for Consideration and Action*

<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
<b><i>Increase financial access and resource availability for the health system</i></b>				
Remove user fees from selected high-priority services (maternal and child care and assisted deliveries) in areas of high poverty (e.g., rural areas)	High on equity and access	Moderate to high: User fees from deliveries and maternal and child health care constitute only 5 percent of user fee revenues nationwide; the greater challenge will be to subsidize the medicines and laboratory fees associated with these services	Moderate	Requires further study; may not be that expensive
MoH introduce resource allocation formula to transfer funds to health service providers based on agreed high-priority criteria (e.g., population, poverty, local revenue collection capacity, urban/rural balance, special needs, etc.)	High: Would give more money to high-poverty, high-need areas, thereby improving access and equity	Moderate: Areas that benefit from status quo would oppose; requires broad consultations and education of participants	Moderate: Design requirements relatively light once decision reached; moderately difficult and slow to roll out	Moderate (technical assistance, consultations and communications, monitoring systems)
Mobilize financial resources for health in general and human resources in particular through increased health share of government budgets or special directed taxes	High, if other areas related to incentives and governance are in place	Requires strong government commitment to health	2–5 years	Medium to high
Provide access to Indigent Fund on basis of services provided independent of private/public ownership	High: This would intervention allow the extremely poor a wider range of provider options	Moderate: Public sector providers could object	Moderate	Moderate: Depends on demand for care by the indigent from private providers





## SECTION 6: OPTIONS FOR USAID

USAID works to ensure that Benin and its neighbors in Sub-Saharan Africa are democratic, on a sustainable growth path, reducing poverty, and no longer dependent on foreign aid. The USAID program in Benin focuses on social services, civil society strengthening, and strong governance. In all its work in Benin, USAID places a strong emphasis on women's empowerment, strengthening decentralization, strengthening civil society, and combating corruption.

In health, USAID's vision is to ensure—

- Access to a minimum package of family health care services
- Attention by people to their own and their children's health, including protecting themselves from HIV/AIDS and other sexually transmitted infections
- Financial access to health services for communities
- Effective contribution by communities to oversight of planning, implementation, monitoring, and evaluation of health services
- Ability of MoH to provide adequate health care to the people of Benin through capacity to plan, budget, train, and supervise staff
- Collaboration among local government, MoH, and civil society in planning and management of local health services

USAID's work is complemented by the emerging activities of the Millennium Challenge Corporation (MCC), which approved a five-year compact with Benin in February 2006 for USD 307 million. USAID focuses on fostering a healthier, better educated, and more productive population and increasing the effectiveness of local institutions in promoting a vibrant private sector and democratic governance. The MCC compact focuses on improving infrastructure and increasing investment and private sector activity. The five-year MCC program is expected to benefit up to 5 million Beninese and lift an estimated 250,000 of Benin's citizens out of poverty by the year 2015. Nearly USD 170 million of the MCC support will strengthen the port of Cotonou. Another USD 20 million will support work with financial institutions to provide micro-, small-, and medium-size enterprises with access to credit and other financial services to expand production and employment.

People in Benin are not as healthy as they could be. In part, this situation results from not using health services. The reasons people underconsume health services include financial barriers, and the perception that services are of poor quality, plagued by corruption, and run by staff members who are not welcoming. People also do not necessarily recognize the need for services. On the provider side, services are less effective than they might be for a number of reasons. Resource transfers are not linked to performance. Ineffective human resources management leaves health workers unmotivated. The country has not yet mobilized all its available resources—the public

sector, the private sector, and society at large—behind a shared and engaging vision of better health.

As this assessment notes, Benin’s health system is plagued by a number of challenges. People underuse the minimum package of family health services that USAID seeks to promote. They lack the information and skills for appropriate self-care. Community members, particularly the poor and people working in the informal sector, lack financial access to services. Communities have appropriate structures for overseeing health services (COGECS) but need additional capacity to be fully effective. The MoH needs greater capacity, particularly in human resources management, performance-based resource allocation, and targeting of public spending, to provide adequate health care to the people of Benin. Collaboration among the MoH, local government, and civil society needs to be expanded and strengthened to plan and manage local health services optimally.

At the same time, Benin has a number of important advantages that USAID should take into account in considering options for supporting the health system. The dual trends of increasing urbanization and increasing education bode well for the future. Increasingly, delivery of health services to a more highly educated and urbanized population will become easier and cheaper. As the economy improves, the movement of growing numbers of the economically active population into the formal sector will contribute to higher incomes, increased government revenues, and coverage of a larger share of the population by social health insurance. Benin’s free press makes getting health and other information to the population relatively easy. The press and the emerging consumer defense leagues offer pathways for the health system to be held accountable to civil society. USAID’s prior work on the development of a basic benefits package means that the basis for costing insurance packages is already available. The extensive public infrastructure for health service delivery means that the capacity to expand access and use is in place. The availability of an essential medicines list is another advantage for Benin’s health system.

Together, the findings of this assessment and the priorities and planned activities of USAID and the MCC offer several opportunities to consider for improving health in Benin. Because USAID has limited financial and technical resources to help confront those challenges, it is important that USAID invest where it can make the greatest contributions. USAID can have the greatest effect by concentrating its ongoing support for Benin’s health system on three main challenges: (1) improving financial protection in health, (2) improving information for decision making and for accountability and transparency, and (3) fostering greater public-private integration. In addressing these three challenges, USAID should work to influence MCC support so that it enhances health objectives and should focus the attention of Benin’s health system on the challenges of meeting the health needs of youth—the 25 percent of Benin’s population between 15 and 24 years of age.

### **Improving Financial Protection in Health**

USAID has a number of important avenues for working on improving financial protection in health. It can continue to support Benin’s nascent mutual health organization movement and

expand its role to include the policy arena as well as direct work with particular MHOs. USAID can work to ensure that as the MCC rolls out its support for the Port of Cotonou and the expansion of financial access for micro-, small-, and medium-size enterprises, this support includes increasing the access of port workers and entrepreneurs to health insurance, whether through mutual health organizations, private insurance, or social insurance. USAID should explore opportunities for building and meeting the expectation of Benin's youth for formal sector employment with financial protection in health.

### **Improving Information**

USAID has a track record and a recognized role in helping improve accountability and transparency of the state toward civil society through better information for decision making. Part of this process involves helping improve the understanding of problems so their root causes can be identified and addressed. For example, to address the high out-of-pocket spending by the Beninese on pharmaceuticals, the country needs more information on what is behind that spending. USAID can help explore issues such as this through its information-gathering support. Another part of improving information is helping to ensure a well-informed citizenry with a good understanding of what they should be able to expect from the health system.

### **Fostering Greater Public-Private Integration**

Improvements in Benin's health system call for mobilizing the entire society and both the public and private sector actors behind a shared vision. USAID can play an important role in helping to foster a broad understanding of how the state can work with the private sector based on experience the United States has accumulated in this area. USAID can seek Global Development Alliance opportunities and work with the MCC to ensure the active engagement of the health sector.

By fully exploiting its current work program and emerging opportunities to incorporate contributions in these three areas, USAID can help Benin accomplish its aim of a stronger health system and improved health for its people.



## ANNEX 1. SUMMARY OF PROPOSED INTERVENTIONS BY ASSESSMENT MODULE

### Stewardship

Proposed Intervention	Likely Health Effect	Feasibility	Implementation Speed	Cost
Inspector General position should have independent enforcement authority and motivation to use this authority	Moderate: This will improve compliance and enforcement of the available laws and regulations	Low–Moderate: Will require a change in the law, political will, and the support from the judiciary	At least one year	Low: Most of these costs are associated with the process of changing the laws
Technical support to strengthen capacity of COGECSSs to play their oversight role more effectively (for accountability and responsiveness)	Moderate–High	High: Requires the identification of partners to support the sensitization and training	2–5 years depending on resource availability	High because many COGECSSs
Explore the possibility of developing a partnership between the documentation center, the Directorate for Health Research, and the university system to share resources and materials	Low–Moderate: Increase access of medical professionals and others to up-to-date health care information	Moderate: This intervention would require discussions with other sectors of the government, including the Ministry of Education	At least one year	Moderate–Low
Review and synthesize the existing health laws and regulations to develop a summary document that would be easier to disseminate and read for busy health professionals	Moderate	Moderate	At least one year	Moderate–High: Includes costs of sensitizing providers to the laws
Provide additional financial and human resources to strengthen the enforcement capacity of the MoH and the medical, dental, pharmacist and midwives boards	Moderate–High	Low: The financing challenges faced by the MoH make allocating additional resources to this intervention difficult	At least one year	High: Requires additional financial allocations

## Health Financing

Proposed Intervention	Likely Health Effect	Feasibility	Implementation Speed	Cost
Remove user fees from selected high-priority services (maternal and child care and assisted deliveries) in areas of high poverty (e.g., rural areas)	High on equity and access	Moderate to high: User fees from deliveries and maternal and child health care constitute only 5 percent of user fee revenues nationwide; the greater challenge will be to subsidize the medicines and laboratory fees associated with these services	Moderate	Requires further study; may not be that expensive
Make MoH resource transfers contractual among levels (center to department to zone to facility) with accountability for specific set of results	High: Could improve efficiency, quality, access	Low to moderate: Those who receive resources without accountability for results may be reluctant to be held to more rigorous standards	Moderate: Would require legal and operational arrangements; would require sensitization	Not that expensive to implement but requires investment in capacity building to run
Have MoH introduce resource allocation formula to transfer funds to health service providers based on agreed high-priority criteria (e.g., population, poverty, local revenue collection capacity, urban/rural balance, special needs, etc.)	High: Would give more money to high-poverty, high-need areas, thereby improving access and equity	Moderate: Areas that benefit from status quo would oppose; requires broad consultations and education of participants	Moderate: Design requirements relatively light once decision reached; moderately difficult and slow to roll out	Moderate (technical assistance, consultations and communications, monitoring systems)
Provide access to Indigent Fund on basis of services provided independent of private-public ownership	High: This intervention would allow the extremely poor a wider range of provider options	Moderate: Public sector providers could object	Moderate	Moderate: Depends on demand for care by the indigent from private providers
Integrate external resource tracking into budget and financial management system	Moderate	Moderate	Moderate	Low

**Health Service Delivery**

<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
Define standards for what should be done at a health facility and how it should be staffed to do so (vision of what happens at point of service, including integration and continuity, meeting felt needs, etc.)	Efficiency and effectiveness of health care services	Some of this work is already done, so it can serve as base; need to engage stakeholders in discussions	1–2 years	Low
Strengthen capacity and practice of quality assurance	Quality of care; institutional sustainability	Build on work already done in the Borgou/Alibori and Zou/Collines	3–5 years to cover country	Training and supervision, ongoing support (low–medium)
Institute a system of “payment for performance”	Quality of care, efficiency, institutional sustainability, but as a mechanism to change incentives, could have powerful effect	Would need conceptual work and significant discussion with stakeholders, as well as testing	5–10 years to have it functioning well	Medium to high

## Human Resources Management

<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
Provide independent authority to the Division of Inspection and Internal Verification and give it all the necessary means to combat clientelism, corruption, violation of work rules and regulations, and culture of impunity in the workplace	This intervention is a prerequisite for all other options; health impact in all areas likely if done	Requires strong government will/commitment	2–5 years	Low
Mobilize financial resources for health in general and human resources in particular	Effect may be limited unless resources are well managed and options #1 and #3 are in place	Requires donors' commitment	2–5 years	Medium to high (if government resources)
Put in place strong incentives to motivate personnel to work in the public sector in general and in rural/remote areas in particular (special bonuses, loans, vehicles, scholarships, promotions, management responsibilities, retirement benefit packages, nonmonetary incentives, such as congratulation/thank you notes, public recognition programs)	Increased worker moral and productivity; increased access, quality, and use of health services	Requires strong government commitment and resources	2–5 years	High
Improve management of personnel careers Put in place a strong performance system, reward or discipline employees of all categories based on performance Systematize “formative” supervision in all units	Increased efficiency/productivity	Will depend on rigorous application of performance and reward norms/criteria	1–3 years	Low to medium
“Contractualize” health services, institute performance-based payments for all health providers	Increased efficiency/productivity; increased use	Government and stakeholder commitment in the system needed; awareness and dialogue with unions may be required	2–5 years	Medium to high



*Annex 1. Summary of Proposed Interventions by Assessment Module*

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<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
Put in place tough licensing regulations for practice in the private sector	Strong licensing regulations may contribute to increased recruitment/retention of doctors in the public sector; will also deter illicit practice and improve quality	Opposition from unions likely; need to negotiate with them	1–3 years	Low
Scale up training of specialist physicians locally and the in-service training/mentorship program	Increased access and quality	Mobilization of financial resources to provide incentives to specialists is a prerequisite	2–5 years	High

## Pharmaceutical Management

<b>Proposed Intervention</b>	<b>Likely Health Effect</b>	<b>Feasibility</b>	<b>Implementation Speed</b>	<b>Cost</b>
Determine and implement an appropriate management fee for storage and administration of pharmaceuticals procured by of parallel programs	Low: This intervention will ensure ongoing financial viability of CAME	Moderate–high: Requires political will to do so	Under a year	Low
Develop and implement policy governing the donation of pharmaceutical products	Low–moderate: Ensures that the pharmaceutical products are of appropriate quality	High: WHO has already developed a template that can be adapted to meet the needs of the country	1–2 years: To allow time for consultation with all stakeholders	Low–moderate
Identify and allocate additional financial resources to strengthen the capacity of the drug control laboratory	High: This intervention will ensure that pharmaceutical products of appropriate efficacy and quality are available	Low: Requires capital investment and requires the long-term commitment from donors and other technical partners	Up to 5 years	High
Establish standards for hiring dispensers and others responsible for making managing pharmaceutical products at the health facility level	High: Will help ensure the rational use of medicines	Low: Requires political will to change the current hiring practices	At least 1 year	Low
Provide training for health facility staff on appropriate estimation of requirements	High: Will ensure that accurate estimates are made therefore reducing stock-outs of products	High	1–2 years	Moderate–high
Establish a system to collect routine pharmaceutical management information	Moderate: Will assist in developing accurate estimates of requirements	Moderate	At least 1 year	Moderate–high
Strengthen the enforcement capacity of the DPM to implement the pharmaceutical laws and regulations, and to improve the postmarketing surveillance activities	Moderate–high	Moderate: Requires investment in human resources and additional financial resources	2–5 years	High
Identify and allocate additional financial resources to increase the storage capacity at CAME	Moderate	Low–moderate	Up to 5 years	High

## Health Information Systems

Proposed Intervention	Likely Health Effect	Feasibility	Implementation Speed	Cost
Increase support to SNIGS: —Require all donors to include an HIS budget line in program budgets	Access to reliable information leads to efficient and equitable health interventions	Donors use SNIGS data for planning; they should not be difficult to convince about the necessity of supporting the system	Ongoing as projects and proposals are developed	Low
—Increase MoH budget allocated to HIS	Same	Low feasibility: MoH has other priorities	2–5 years	Medium
Reduce duplications and costs associated with data collection and reporting through better coordination of data collection efforts (e.g., using same tools, sharing resources, reducing reporting burden/requirements on health personnel at health facilities)	Better coordination leads to efficient resource use	This option is feasible; however, a high-level decision (e.g., ministerial order) is needed to require collaboration and coordination among various directorates and programs	1 year	Low
Equip all health facilities with computers and create an electronic network (intranet and extranet) to link the three levels of the health pyramid, vertical programs, and SNIGS, as well as subsystems managed by non-MoH entities to improve the flow, reporting, and completeness of information	Access to reliable and timely information leads to improved planning	Requires financial resources; not feasible if resources are not available; work on #1 first	2–4 years	Medium to high
Strengthen capacity at the peripheral level to collect, analyze, and use data	Access to reliable and timely information leads to improved planning	Requires financial resources; not feasible if resources are not available; work on #1 first	1–3 years	Medium
Put in place a law or regulation mandating the private sector and other subsectors outside the MoH authority to report health information to SNIGS	Access to complete and accurate health information, in turn improves planning, efficiency, and equity of services	Build on existing efforts to improve public-private collaboration	1–2 years	Low

## Private Sector Engagement

Proposed Intervention	Likely Health Effect	Feasibility	Implementation Speed	Cost
Provide independent practitioners, particularly nurses and midwives in rural areas, with access to supplies, referral, medical consultation hotline, continuing education in exchange for reporting and engagement in public health programs	High: Increased access to priority public health interventions; improved referral; improved quality of care	High	High: This intervention would be relatively quick to start up	Moderate: Public health program supplies, distribution logistics, telephone charges, physician time, additional information collection, and analysis
Activate board for traditional practitioners and engage them in continuing education and referral		Moderate: Traditional practitioners may be resistant to government initiative	Moderate: This intervention would require consultations, legal steps before launching	Moderate: Consultations and communications, drafting of legal framework, staffing and office, outreach
Explore constraints to greater private sector laboratory operation and devise responses	Moderate: Increased availability of laboratory services could improve service quality	High: The study would be very easy to conduct; the feasibility of the response would depend on findings and recommendations	High: Quick to implement study	Low: At least in first phase
Provide private facilities with predictable access to finance, equipment, and supplies on contractual basis in exchange for defined results in priority programs and in providing care for indigent	Moderate to high: Depends on analysis of additional coverage these facilities could achieve	Moderate to high: Likely support from private facilities but public sector actors may see as competition for scarce resources and object	Moderate	High: Transfers to private facilities
Help strengthen Consumer Defense League's capacity to defend consumer rights in health	Moderate: Stronger civil society watchdog function could substitute for state regulatory activity	High: Basis in existing league, mostly requires strengthening this organization; robust press can also support this intervention	High: This intervention would be relatively quick to start up; depends on uptake by civil society groups	Low

## ANNEX 2. IN-COUNTRY ASSESSMENT SCHEDULE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
April 15 and 16 <ul style="list-style-type: none"> <li>• Arrival</li> </ul>	April 17 <ul style="list-style-type: none"> <li>• Easter holiday</li> <li>• 2–5 pm: Team meeting</li> <li>• Meet local consultant</li> </ul>	April 18 <ul style="list-style-type: none"> <li>• USAID meeting</li> <li>• Meeting with DPP Director</li> </ul>	April 19 <ul style="list-style-type: none"> <li>• Individual interviews</li> <li>• Meeting with SecGen of MoH</li> <li>• Meeting with Technical Committee for MoH to review assessment goals and plan for workshop</li> </ul>	April 20 <ul style="list-style-type: none"> <li>• Individual interviews</li> <li>• 1–2 pm: Team meeting</li> </ul>	April 21 <ul style="list-style-type: none"> <li>• Individual interviews</li> </ul>	April 22 <ul style="list-style-type: none"> <li>• 2–6 pm: Team meeting</li> <li>• Preparation for field visits; development of field questions</li> </ul>
April 23 <ul style="list-style-type: none"> <li>• <i>Travel to Zones (Mono/Couffo and Zou/Collines) for regional/zonal/community meetings</i></li> </ul>	April 24 <ul style="list-style-type: none"> <li>• Interviews at regional/zonal/community levels</li> </ul>	April 25 <ul style="list-style-type: none"> <li>• Interviews at regional/zonal/community levels</li> <li>• Travel back to Cotonou</li> <li>• Team meeting to review field work inputs</li> </ul>	April 26 <ul style="list-style-type: none"> <li>• Meeting with donor health partners team; feedback on assessment and discussion of preliminary results</li> <li>• Individual interviews</li> <li>• Planning for stakeholder workshop</li> </ul>	April 27 <ul style="list-style-type: none"> <li>• Planning for stakeholder workshop</li> <li>• Meeting with the Minister of Health; discussion of preliminary results</li> </ul>	April 28 <ul style="list-style-type: none"> <li>• 8 am USAID Mission Director briefing</li> <li>• 9 am–1 pm Stakeholder Workshop</li> </ul>	April 29 <ul style="list-style-type: none"> <li>• Team meeting; review inputs from workshop</li> </ul>



## ANNEX 3. CONTACTS

### Central Level

Secretary General of the Ministry of Health	Dr. Benoit Honore Faihun
Director of Planning and Forecasting	Christian Eyebiyi
Director of Hospitals	Dr. Pascal Dossou-Togbe
Director of Human Resources	Vincent B. Faby
Deputy Director, Research Directorate	
Community Health/Mutuelles Service, National Directorate of Health Protection	Dr. Marcelain Ayi
Health Regulation Service, National Directorate of Health Protection	Dr. Armand Houndgrebo
Health Zone Development Director	
Technical Advisor for Quality of Care	Eugenie Dossou Degla
Representative Directorate of Nursing and Midwifery Care	Euloge Bokossa (Planner/economist)
	Ismanth Djaboutou (Inspector)
Director of Family Health	Dr. Noel Ekué
Coordinator, National Malaria Program	Dr. Hortense Kossou
Coordinator, National AIDS Program	Dr. Marcel Zannou
Coordinator and Deputy Coordinator, National Program on Tuberculosis	
Director of the Directorate of Diagnostics and Blood Transfusion	Dr Ludovic. Y. Anani
President of the Board of Physicians	Dr Soule Daouda
Coordinator of the Program for the Promotion of Traditional Medicine Pharmacopeia	Regina R. Gnavadja
President of the Board of Pharmacists	
Deputy Director, CAME	Prosper C. Ahonlonsou
Director CAME	Dr Kokou O. Afogbe
Director, DPM	Dr Coffi Pascal Hessou
DPP, MoH	
DPP, MoH	Raymond Amoussou
Director of Financial and Material Resources, MoH	Raji Suraji
Accounting, DRFM, MoH	Felicien Saizonou
Management Support, DRFM, MoH	Boniface Votounjnon
Budgeting, DRFM, MoH	Marceen Tejbojbahoun
MFE delegate to MoH	Alice Anato
Medecin-Directeur, Centre de Santé de Menontin	Hounsa Methurin
Responsable des Ressources Humaines, Société des Huileries du Bénin	Dr. Sylvestre P. Abley,
Medecin-Directeur, Hôpital Saint Luc	Mme. Rogelyne H. Hounsa
Chef du Department Santé, NSAB Bénin Assurances	
Directeur Commercial, NSAB Bénin Assurances	Dr. Marie-Anne Dovonou,
	Dr. Serge Hazoume,
	M. Edmond Bossou,

Directeur General, Centre de Promotion et d'Encadrement des Petites et Moyennes Entreprises	M. Théophile Capo-Chichi,
General Services Officer, Embassy of the United States of America	Mme. Mozella N. Brown,
Point Person, Financial and Technical Partners (Health), Swiss Cooperation	Gnes Adjou-Moumouni
Président of the « Ordre des Sages Femmes »	Dr. Ayi Marcelin
Santé Communautaire, DNPS, Ministère de la Santé	Dr. Houndjrebo Armand,
Réglementation Sanitaire, DNPS, Ministère de la Santé	Dorothee Yevide
DAC / MSP	Dr. Edward Comlan Comlanvi
Disease Prevention and Control Advisor, WHO	

### **Department of Mono/Couffo**

Departmental Director for Public Health Governor	Dr. Gerome Sossa
Secretary General, Dogbo Commune	Koffi Gustave Ametonou
Health Zone Coordinator – Lokossa	Dr. Denis Sossa (MCZS)
	Mathias Fanou (CAR)
Health Zone Coordinator – Comè	Dr. Blaise Guezo-Mevo
Zonal Hospital Director – Comè	Dr. Gaspar Gbessi
CSA-Madjre	Constantin Oussou (Head Nurse)
	Toussaint Dah (Accountant, CSC-Dogbo)

### **Department of Zou/Collines**

Prefect of Abomey	Timothee K. Adjitche
First Deputy to Mayor of Abomey	Adjakidje Nassi Antoine,
DDS of Zou Collines	Dr Oscar Dsigbenoude
Administrator, Health Economist, CHD-Abomey	Richard Venance Gandaho,
Pharmacist, CHD-Abomey	Dr Y. Yhass Adande-Kinti
Guérisseur Tradi-Praticien	M. Dako Wegbe Nestor,
,Infermiere, Société des Huileries du Bénin	Mme. Favi Virginie
EEZS Team Abomey	
COGEA du CSA Vidole	
CSA – Djegbe Abomey	



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