IVORY COAST PRIVATE HEALTH SECTOR ASSESSMENT

August 2013

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ACRONYMS

ACPCI	Association des Cliniques Privées de Côte d'Ivoire (Association of Private Clinics of Ivory Coast)
AFD	Agence Française de Développement (French Development Agency)
AGPF	Ariel Glaser Pediatric AIDS Foundation
AIBEF	Association Ivoirienne pour le Bien Être Familial (Ivorian Association for Family Wellbeing)
AIDS	Acquired Immunodeficiency Syndrome
AIS	AIDS Indicator Survey
AIMAS	Agence Ivoirienne de Marketing Social (Ivorian Agency for Social Marketing)
ANC	Antenatal care
APPCI	Association de Producteurs Pharmaceutiques de Cote D'Ivoire (Association of Pharmaceutical Producers of Ivory Coast)
ART	Antiretroviral Therapy
ARV	Antiretroviral
ASACI	Association des Sociétés d'Assurances de Cote d'Ivoire
CD4	Cluster of Differentiation 4
CDC	Centers for Disease Control and Prevention
CIMLS	Inter-Ministerial Committee for the Fight against AIDS
CIPHARM	Côte d'Ivoire Pharmacie
CIRBA	Centre Intégré de Recherches Biocliniques d'Abidjan (Integrated Center for Bio-clinical Research of Abidjan)
CNLS	Conseil National de Lutte contre le SIDA (National Advisory Board for the Fight against AIDS)
COSCI	Conseil des Organisations de lutte contre le SIDA en Côte d'Ivoire (Council of Organizations for the Fight against AIDS in Ivory Coast)
CTB	Coopération Technique Belge (Belgian Technical Cooperation)
DEPS	Direction des Etablissements et Professions de Santé (Directorate of Professions and Health Care Facilities)
DHS	Demographic and Health Survey
DIPE	Direction de l'Information, de la Planification et de l'Evaluation (Directorate of Information, Planning and Evaluation)
DPM	Direction de la Pharmacie et des Médicaments (Directorate of Pharmacy

	and Medicines)
DRH	Direction des Ressources Humaines (Directorate of Human Resources)
EGPAF	Elizabeth Glaser Pediatric Aids Foundation
FHI	Family Health International
FBO	Faith-based Organization
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GMP	Good Manufacturing Practices
GOCI	Government of Cote d'Ivoire
GTZ	German Technical Cooperation (Gesellschaft für Technische Zusammenarbeit)
HCT	HIV counseling and testing
HIV	Human Immunodeficiency Virus
LNSP	Laboratoire National de Santé Publique (National Public Health Laboratory)
MIS	Management Information System
MOH	Ministry of Health
MUGEF-CI	Mutuelle Générale des Fonctionnaires et Agents de l'Etat de Côte d'Ivoire
NGO	Nongovernmental Organization
NHA	National Health Accounts
ONMCI	Ordre National des Médecins de Côte d'Ivoire (National Order of Ivory Coast's Doctors)
OVC	Orphans and Vulnerable Children
PDSSI	Projet de Développement des Services de Santé Intégrés
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PISAM	Polyclinique International Saint Anne-Marie
PLOS One	Public Library of Science Online
PLWHA	People Living With HIV and AIDS
PMTCT	Prevention of Mother-to-Child Transmission
PNPEC	Programme National de Prise en Charge médicale des personnes vivant avec le VIH (National Program of Medical Care for PLWHA)
PPP	Public-Private Partnership
PSA	Private Sector Assessment
PSI	Population Services International
PSP	Pharmacie de Santé Publique (Public Health Pharmacy)
PUMLS	Projet d'Urgence Multisectoriel de Lutte contre le SIDA

RETRO-CI	Retrovirus-Côte d'Ivoire
RIP+	Réseau Ivoirien des PVVIH (Ivorian Network of PLWHA)
RSB	Renaissance Santé Bouaké
SCMS	Supply Chain Management System
SHOPS	Strengthening Health Outcomes through the Private Sector
SIGDEP	Système d'Information de Gestion – Dossier Electronique Patient (Management Tool for Electronic Patient Files)
STI	Sexually Transmitted Infections
SYNAMEPCI	Syndicat National des Médecins Privés de Côte d'Ivoire (Syndicate of Private Doctors of Ivory Coast)
TB	Tuberculosis
THE	Total Health Expenditure
UNAIDS	Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNGASS	United Nations Guidelines on AIDS
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

New legislation from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) places increased emphasis on improving sustainability of the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) response by strengthening health systems, building local capacity, and leveraging the private sector. It is with these objectives in mind that the United States Agency for International Development (USAID) mission in Ivory Coast asked the Strengthening Health Outcomes through the Private Sector (SHOPS) project to conduct an assessment of the private health sector with a view to identifying new strategies to engage the private health sector.

The assessment team found that although the private health sector has grown rapidly over the past decade, much of that growth has been unregulated due to internal political conflict and financial crises. Given its fiscal constraints and the atmosphere of constant crisis, the Ministry of Health (MOH), not surprisingly, has given little thought to engaging and regulating the private health sector, a sector that filled a critical service delivery role during the years of conflict in places where the public system was absent or severely affected. However, the for-profit sector, in particular, has suffered from the absence of regulatory oversight and its exclusion from the national response to the AIDS epidemic.

In 2013, opportunities exist for the private health sector to support Ivory Coast's national response to the persisting HIV and AIDS epidemic. Despite significant national progress in mobilizing HIV and AIDS interventions, the level of unmet need for treatment is high and appears to be related to the large number of people who do not know their HIV status or are unable or unwilling to access public services. The government has opened many new testing sites where testing is free, yet people avoid getting tested, most likely because of the stigma still associated with the disease or because of concerns over confidentiality in the public sector. By offering quality HIV counseling and testing (HCT) more confidentially and by identifying, retaining, and treating HIV-positive clients already in private care, private for-profit health providers can become important sources of HIV and AIDS services. Efforts to ensure private providers are enabled to provide HCT services as an entry point to care will be a first step toward expanded provision of antiretroviral therapy (ART) in the private for-profit sector.

Other key findings of this assessment include the following:

- In addition to using an outdated legal and regulatory framework, the regulatory agencies governing the private sector lack the resources to fulfill their role and apply existing laws.
- For general health financing, Ivoirian consumers bear the greatest burden through out-of-pocket payments, mostly for medicines. In the HIV and AIDS sector, international donors provide nearly 90 percent of all financing.
- Dual practice of public sector providers working in the private sector is quite common. Although the health system experiences some advantages through this practice, it is insufficiently regulated and open to abuse, which negatively impacts patient outcomes.
- While the national treatment program–*Programme National de Prise en Charge médicale des personnes vivant avec le VIH* (PNPEC)—has established a number of

treatment centers in private nonprofit sites, there has been a reticence to establish sites in for-profit clinics. To date, only four private for-profit sites offer ART (*Polyclinique internationale Hôtel Dieu Abidjan, Polyclinique Les Etoiles Abobo, Polyclinique des II Plateaux, and Polyclinique International Saint Anne-Marie*).

Key recommendations from the private sector assessment are summarized in Table 1.

TABLE 1: KEY RECOMMENDATIONS

Recommendation Area	Recommendations
Governance	The MOH would benefit from a platform for public-private dialogue to better collaborate with the private health sector. Steps in the process include developing a task force/steering community of key public and private sector stakeholders, conducting a legal and regulatory review, developing a public-private partnership (PPP) roadmap or action plan, and creating a unit in charge of engaging the private health sector and coordinating government activities that impact the private health sector. The Department of Professions and Health Care Facilities (DEPS) needs adequate resources to provide effective supervision of the private health sector. Additionally, the DEPS process for authorizing new private sector facilities could benefit from a review to improve transparency and efficiency.
Health Financing	The government may want to consider designing its universal health coverage scheme to include services in the private health sector and some coverage for medicines. For financing of HIV and AIDS care, limiting free care to patients without health coverage and encouraging provider-based *mutuelles* among selected nonprofit providers would leverage scarce resources. The government should consider an increase in its share of health financing in general and especially for HIV and AIDS care.
Human Resources	A review of dual practice and development of measures to permit and regulate it will help prevent negative impact from this practice. The government can make greater use of the private health sector through contracting out or contracting in arrangements. Facilitating access to government- or donor-sponsored training for private providers will help improve quality of care in the private sector.
Service Delivery	The government and donors may want to institute co-funding requirements on local nongovernmental organizations (NGOs). The requirements would mandate NGO recipients of donor funding to put in place mechanisms that raise a certain percentage of their operating costs from local, nongovernmental sources. The National Program of Medical Care for people living with HIV and AIDS (PNPEC) should consider expanding the number of private providers who are accredited to provide HCT, prevention of mother to child transmission (PMTCT) and ART, and allow these providers to access government-procured commodities. One way to manage this expansion would be through a social franchise.

Medicines and Technologies	The government's HIV and AIDS program would benefit from exploring ways to leverage the strength of the private pharmaceutical sector by contracting parts of the supply chain function (e.g. distribution from district stores to facilities), as well as by encouraging local manufacturing of HIV and AIDS commodities. The government may consider long-term investments to encourage local production of some antiretroviral (ARV).
Information Systems	The Directorate of Information, Planning, and Evaluation (DIPE) would benefit from private sector engagement initiatives that link access to government supplies (e.g., vaccines) and training to the provision of data. Use of mobile technologies can facilitate the reporting of data. A system of unique identifiers for ART patients could permit tracking of patients who move between public and private facilities.

A wide variety of public-private partnerships (PPPs) in HIV and AIDS is possible if the government can provide the necessary leadership. These possibilities include a social franchise for HIV and AIDS service delivery, PPPs for counseling and testing and for the supply chain, and the development of a unique national tracking system for people receiving ART. Formalizing private sector engagement at the departmental level following the Yamoussoukro example is also recommended.

I. CONTEXT

I.I HISTORY OF THE HIV AND AIDS RESPONSE IN IVORY COAST

Nearly 30 years have passed since the first cases of AIDS appeared in Ivory Coast. The number of cases has grown steadily since the epidemic began, in spite of early response efforts put in place after 1988. Seroprevalence estimated from sentinel sites exceeded 10 percent in the general population in the late 1990s. Among commercial sex workers, prevalence reached 87 percent in urban areas in 1992, but more recently has been estimated to be around 30 percent.[1] Since seroprevalence data have been collected using population-based surveys, the estimate of infection in the general population has declined, from 4.7 percent in 2005 (AIDS Indicator Survey (AIS), 2005) to 3.7 percent in 2012.[2]

Possible reasons for the reduction in prevalence include more accurate measurement, adoption of safer sex behaviors, more readily available testing sources, and the potential impact of better and more widespread treatment, which reduces viral loads and, consequently, rates of transmission among people living with AIDS. In spite of significant investment in behavior change campaigns since the early 1990s, minimal progress has occurred in changing risky behavior. Supplies of and access to condoms has not increased significantly in the last 10 years and, therefore, would not explain the reduction in prevalence. Condom availability decreased in some parts of the country due to the civil conflict. Condom use has declined since 2005 and the number of people who have multiple sexual partners has declined only slightly. In terms of initiation into sexual activity, it appears that young women (15–19 years) are delaying their first experience more than women of the earlier generation who are now in the 40–49 age range. However, males in the 15–19 age group are engaging in sex earlier than men of previous generations. One possibility for this is that young women are having their first sexual experience with males in their age group, whereas in the past, women were more likely to have their first sexual encounter with an older man. If this is the case, it is a positive change since the reduction in cross-generational sex reduces the chance that a cohort with a higher rate of infection will pass on the infection to a younger cohort with reduced prevalence. Table 2 illustrates the trend in behavior since 1994.

TABLE 2: KEY HIV PREVENTION BEHAVIORAL INDICATORS 1994–2011

			1994	1998	2005	2011
% reporting having used a condom during their last sex act		Women	6%*	31%	34%	30%
		Men	23%*	57%	52%	33%
% of adults 15–49 reporting 2 or more sexual partners during the last 12 months		Women	N/A	8%	5%	4%
		Men	N/A	34%	31%	29%
% of the population having had their first sex act before the age of 15	Population 15–24 years	Women	N/A	N/A	19%	N/A
		Men	N/A	N/A	15%	N/A
	Population 40–49 years	Women	N/A	N/A	28%	N/A
		Men	N/A	N/A	7%	N/A

Sources: Demographic and Health Survey (DHS) I 1994; DHS I- III 1998-1999; AIS 2005; DHS III 2011-2012

*% reporting having used a condom during last sex during the two months prior to the survey

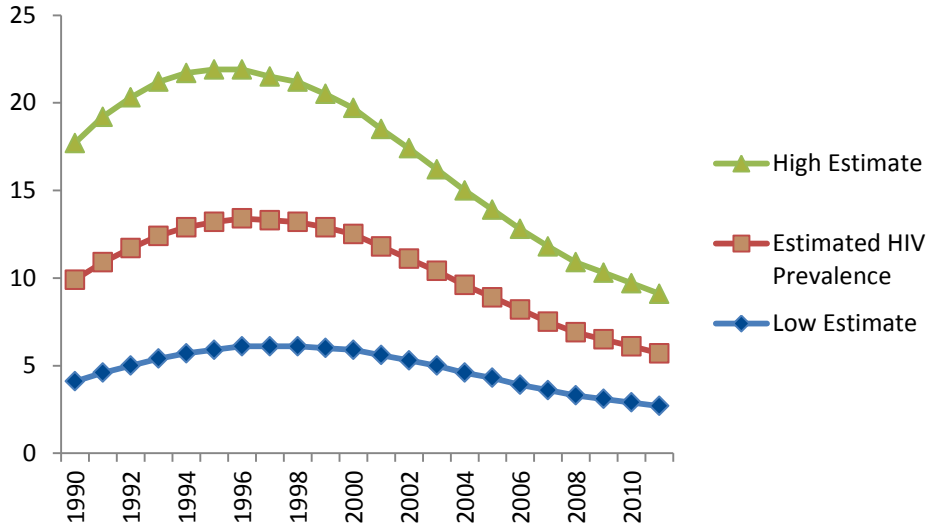
[1] World Health Organization Epidemiological Fact Sheet 2008 HIV AIDS in Ivory Coast

[2] Plan National de Développement Sanitaire 2012-2016

While some of these behavioral changes may have contributed to lowering the prevalence rate, it seems just as likely that the lower numbers are due to improved measurement and expanded testing and treatment services. Progress in behavior change that began in the late 1990s may have been undone during the internal conflict that separated the country from 2002–2011 and made AIDS prevention interventions more difficult in many areas. Regions in the west of the country that have been most affected by the conflict show some of the highest rates of infection, particularly among women.[3] A report of serosurveillance of sentinel sites in 2008 showed a national HIV seroprevalence of 4.5 percent among pregnant women aged 15–49.

Co-infection with tuberculosis (TB) is also quite common in Ivory Coast, with about 30 percent of TB patients being infected with HIV in 1987 and 33.1 percent in 2008. The number of patients co-infected with TB and HIV grew from 1,276 in 2007 to 2,519 in 2008, of which 995 were men and 1,524 were women receiving treatment for TB. Figure 1 presents the estimated rate of HIV prevalence among adults.

Figure 1: Estimated Adult HIV Prevalence Rate



Source: Joint United Nations Program on HIV/AIDS (UNAIDS) 2011

There has also been a significant feminization of the epidemic. In the early stages of the epidemic, there were three times as many AIDS cases among men as among women. From the late 1980s until the present, the tendency has been reversed, with many more women becoming infected, so that as of 2005, the sex ratio was 2.2 infected women for each infected man.

Ivory Coast has the additional challenge of contending with both strain types of the virus (HIV-1 and HIV-2) with two different rates of seroprevalence, although prevalence of HIV-1 is generally much higher than that of HIV-2. Pediatric infection has also been a significant problem, with about 63,000 cumulative cases of pediatric AIDS as of 2009. Overall, in 2008, the Joint United Nations Program on HIV/AIDS (UNAIDS) estimated the number of people living with HIV in

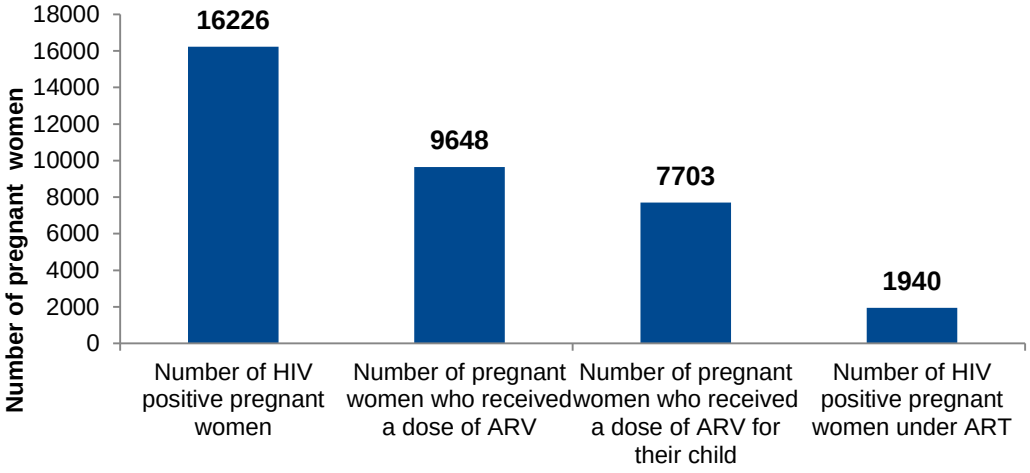
[3] Routine data from the project for prevention and treatment of HIV/AIDS/sexually transmitted infections among mobile populations in the countries of the Union of the Mano River show a seroprevalence of 41 percent among women and 18.6 percent among men in 2009 in the border areas of Danané and Zouan-Hounien.

Ivory Coast to be 440,000, including 250,000 women. The annual number of new infections is estimated at 19,000. Of those estimated to be living with HIV, it is unclear how many are aware of their status. In 2005, only 4 percent of adult women and 3 percent of men had an HIV test and received their results[4]. The 2011–2012 Demographic and Health Survey (DHS) shows significant improvement in these figures with 35 percent of women and 10 percent of men having taken the HIV test and received their results in the last 12 months. This improvement can be attributed in part to the growth in the number of testing sites which increased from 378 in 2008 to 703 in 2010.[5] The number of people being tested and receiving their results increased from 185,582 in 2008 to 645,333 in 2010; however, these figures do not control for clients getting tested several times during the year, which means the actual number of new people being tested will be much lower.

Access to testing sites does not appear to be a constraint to greater testing since approximately 970 testing sites are distributed throughout the regions. This does not include any potential private sector testing sites that the government does not track. According to the *Programme National de Prise en Charge médicale des personnes vivant avec le VIH* (PNPEC), there are no waiting lists of patients determined to be eligible for antiretroviral therapy (ART) who cannot be enrolled in treatment. There are, however, a number of patients who begin treatment, but subsequently drop out of treatment.

Data from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) partners estimate the 12-month ART retention rate to be at 65 percent, well below the 80 percent recommended by the World Health Organization (WHO) and other international standards, leading to conclude that Ivory Coast faces a generalized challenge with respect to retention. Unfortunately, Ivory Coast has no national tracking system. Some of these treatment dropouts may have simply moved and taken up treatment in new locations, but some, undoubtedly, have stopped treatment and they make up part of the estimated unmet need. Treatment dropout for pregnant women is also troubling, as shown in Figure 2.

FIGURE 2: PMTCT SNAPSHOT FOR IVORY COAST IN 2010



Source: DIPE, Annual report of HIV Indicators in Ivory Coast 2010

[4] AIS, 2005

[5] DIPE, Rapport Annuel des Indicateurs VIH du Secteur Santé en Côte d'Ivoire 2010, Novembre 2011[This publication should be moved to reference section]

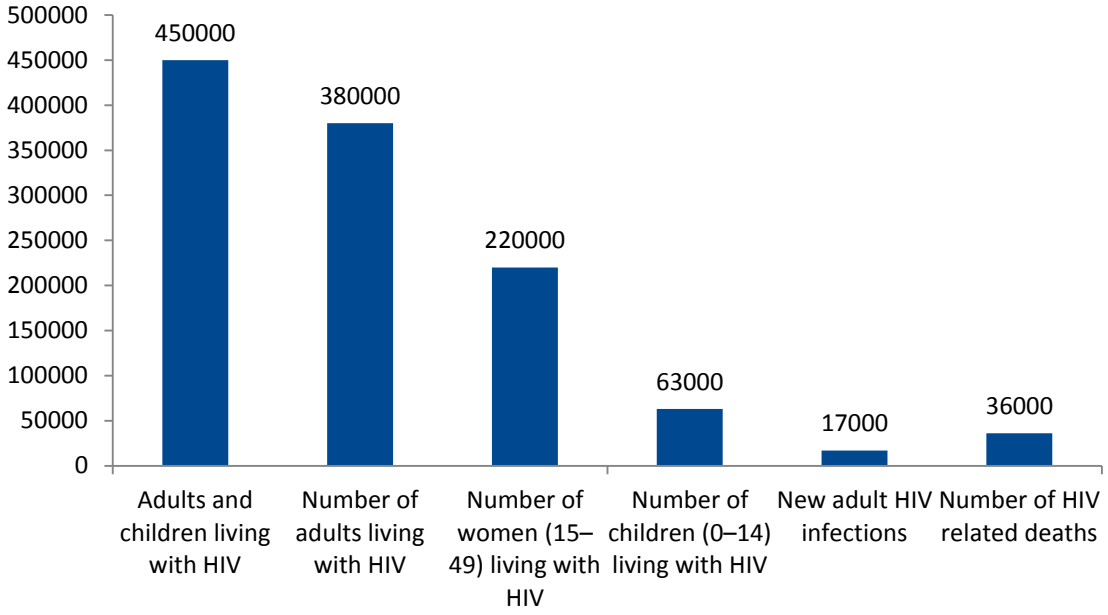
Of the 16,226 pregnant women who were to receive antiretroviral (ARV) prophylaxis in 2010, only 9,648 received an intervention and only 7,703 received a preventive dose for their child. Key informants interviewed stated that although coverage of prevention of mother-to-child transmission (PMTCT) services has increased, utilization has declined and remained low. This has been attributed to issues of service quality and lack of motivation among public sector nurses and physicians to offer the service and lack of information among women to seek the service. Many providers view it as the patient's responsibility to seek out PMTCT services, and in a region where greater than 50 percent of births still occur at home and only 57 percent are attended by a skilled provider (UNICEF 2012),[6] PMTCT rates will remain low if no specific efforts are made to reach these women with the service. The number of treatment centers and the availability of drugs were not reported as issues, but lack of effective distribution and effective service delivery might be. Reaching women and their newborns with the required drugs via additional points of care, motivating providers to offer and deliver PMTCT services, and reaching women who have home births with these service will be essential in improving PMTCT accessibility and utilization. Recently, the rate of testing as part of antenatal care (ANC) was reported at only 4.6 percent.[7] of women (PLOS One 2012), and with only 45 percent of these women attending all four of the WHO-recommended ANC visits, there is a need to further integrate HIV counseling and testing (HCT) and PMTCT interventions into ANC, and to increase ANC accessibility and utilization.

It is likely the vast majority of the estimated 140,000 people[8] with an unmet need for ART are people who are living with HIV, but unaware of their status. In spite of the publicity about AIDS and the significant investment of PNPEC and its partners in scaling up the supply of testing and treatment centers, demand for testing remains low (PLOS One 2012)[9]. Even in the government-sponsored sites, the number of HIV tests given averages less than three a day per site. People have a general awareness of HIV and AIDS and an understanding that free ART is widely available at public and nongovernmental organization (NGO) sites; however, many adults at risk still do not get tested regularly or at all. One can only conclude that despite increased coverage of public testing and treatment services, the stigma associated with HIV-positive status and concerns over service quality remain significant barriers to testing for sexually active adults.

With support from PEPFAR and the Global Fund, the scale-up of ART service delivery was rapid, increasing from 2,473 people on ART in 2003 to 51,820 in 2008 and then to 89,410 in September 2011.[10] In spite of these efforts, as of 2009, there were 450,000 people living with HIV and AIDS (PLWHA) and the cumulative number of HIV related deaths was 36,000, as shown in Figure 3.

[6] UNICEF, Countdown to Zero
[7] PLOS One (2012)
[8] UNGASS 2011 estimates that 230,000 people living with HIV have a CD4 count greater than 350 and of these, only 89,410 in 2011 were undergoing antiretroviral therapy. We have rounded this to 90,000 to allow for additional patients put on ART and to convey the fact that these are broad estimates.
[9] PLOS One (2012)
[10] Rapport Annuel VIH/Sida du Secteur Santé en Côte d'Ivoire 2007-2008

FIGURE 3: CUMULATIVE CASES OF HIV AND AIDS



Source: Conseil National de Lutte contre le Sida 2010

The most-at-risk groups include (1) men who have sex with men, (2) women (30–34 years) who are victims of abuse and sexual violence, (3) serodiscordant couples, (4) sex workers, (5) truckers, (6) military personnel, (7) teachers, (8) sexually transmitted disease carriers, and (9) TB patients. Incidence of sexually transmitted infections (STI) in Ivory Coast was 7 per 1,000 during the period 2006–2010.

The primary cause of HIV infection remains unprotected heterosexual sex among adults with concurrent multiple partners and other contributing factors include early sexual initiation, sexually transmitted diseases, poor understanding of HIV transmission, gender roles, genital mutilation, tattooing, and traditional customs of widow marriage.

1.1.1 RESPONSE TO THE EPIDEMIC

When the Centers for Disease Control and Prevention (CDC) established a field office in Abidjan in 1988 to research HIV transmission, this led the Ivoirian government to establish an important research center, Retrovirus-Côte d'Ivoire (RETRO-CI), which also provided treatment to many Ivoirians. RETRO-CI also benefitted from support from the Belgian cooperation. The government's earliest first national strategies to combat HIV and AIDS occurred in the early 1990s with the support of the WHO Global Program against AIDS. The first areas of focus were public education campaigns to prevent transmission, expanded diagnosis and identification efforts, and timely treatment of AIDS patients. Subsequent plans broadened the response by creating an institutional base with a formal mission to lead the fight, establish a system of national surveillance, expand prevention efforts by increasing the availability of condoms, secure the blood supply, and expand educational efforts. Activities to prevent mother to child transmission were not taken into account until 1996.

Through the Integrated Health Sector Development Project, the World Bank provided general support to the National Program for the Fight against AIDS (*Programme National de Lutte contre le SIDA*) as well as to other ministries and NGOs working in the anti-AIDS effort. German Technical Cooperation (GTZ) provided technical support in western regions of the country,

particularly in the control of STIs. Belgian Technical Cooperation (CTB) also supported AIDS prevention efforts and STI control in the region of Moyen-Comoe. The Canadian cooperation was another active partner in the implementation of the syndromic approach to controlling STIs, especially with high-risk groups. The French cooperation was very active in AIDS control efforts through support for research, PMTCT, information, education and communication, and behavior change communications. The United States Government provided significant support to research efforts through the CDC and RETRO-CI, as well as by supporting prevention efforts through USAID, which funded condom social marketing from 1992 to 1995, and the Family Health and AIDS Prevention project, which worked regionally to prevent AIDS through behavior change communications, social marketing, service delivery, and provider training from 1996 to 2002.

Several research organizations, RETRO-CI, the Integrated Center for Bio-clinical Research of Abidjan (CIRBA), CeDres, and others mobilized multiple sources of funding from bilateral and private donors to conduct epidemiological research, clinical trials, and therapeutic research as treatment became more viable. Private workplace clinics of large employers such as the national utilities companies (*Compagnie Ivoirienne de l'Electricité* and *Société de Distribution d'Eau de la Côte d'Ivoire*), the transport company (*Société des Transports Abidjanais*), *Palm Côte d'Ivoire*, *Société des Caoutchoucs de Grand-Béréby* (a major rubber company), and others also contributed funding from their own operations to provide prevention and treatment programs for their employees.

At the 10th international Conference for the Fight against AIDS organized in Abidjan in 1997, a National Solidarity Fund was established to allow access to treatment for low-income PLWHA. The fund began operations in 1998 with an initial allocation of CFA Francs 600 million.

Around the same time an international solidarity fund for therapy was created to address the problem of mother-to-child transmission and was launched with support from UNAIDS and the government of France. Other multilateral and bilateral donors funded different aspects of the national AIDS plans. USAID and, subsequently, the German development bank, KfW, funded a national condom social marketing program.

A second large expansion of funding and partners occurred in 2003 and 2004 with the creation and implementation of programs under PEPFAR and the Global Fund. While expanding funding for prevention programs, especially those that target high-risk groups, these donors made major investments in building the national capacity to move treatment beyond the small number of people enrolled in research efforts and to create national access for all PLWHA. From this beginning, with the creation of the PNPEC, the government now provides ongoing treatment to nearly 90,000 citizens (UNGASS 2011).

Throughout the country's AIDS control efforts, nearly all interventions focused on working through the government and building its capacity to respond. In the late 1990s, and especially under PEPFAR, efforts were made to enlist civil society and nonprofit organizations. The private for-profit health sector was virtually absent from all initiatives, in spite of the fact that in the earliest days of the epidemic, the only place where PLWHA were treated was in the private sector. Prior to the expansion of the government's treatment program under PNPEC, issues arose about the number and inconsistency of HIV treatments being practiced in the private sector. As a result, and out of concern for costs and the risks of resistance, the government made a decision to keep the monopoly on treatment and selectively accredit providers and facilities that would be able to offer ART.

I.I.2 FUTURE OF THE HIV/AIDS EPIDEMIC

Since 1999, there has been a consistent trend in declining prevalence in both urban and rural areas (see Figure 1). Whether this downward trend will continue, prevalence will stabilize, or Ivory Coast will join countries like Uganda that have unfortunately seen their prevalence move upward after several years of decline, will depend on how the country manages the epidemic in the future. Ivory Coast has a "mixed" epidemic, meaning that although HIV infection has been generalized in the population, it is also influenced by infection levels and behaviors of key high-risk groups. This suggests that future trends in seroprevalence will depend on how well the country manages infection in these high-risk groups, such as sex workers and men having sex with men, and in the general population.

Studies of the transmission of HIV confirm that the epidemic in Ivory Coast is essentially heterosexual and widely diffused in the general population, especially among those who practice risky sexual behaviors. Young women seem to be particularly at risk given early initiation to sex, which is evidenced in a much higher prevalence for women aged 20–24 (4.5 percent) than for men in the same age category (0.3 percent). This also suggests patterns of older men having sex with younger women, which relate to gender norms in spite of the reduction of this practice previously noted. Seroprevalence among sex workers remains high at 27 percent in spite of targeted interventions. Although data are sparse on the numbers of men who have sex with men and their levels of infection, evidence suggests that this is another group at high risk. If political stability and peace remain in the country, one can expect to see lower levels of infection among the military and their partners. However, if economic and regional trade increases, transporters may be at increased risk. Behavior change communications and service delivery efforts can mitigate these risks, but they will have to be more evidence based, well-designed, and appropriately targeted if they are to have more impact than recent behavior change communications efforts.

Because of the apparent impact of treatment on prevention (through testing and detection and by reducing viral loads, which reduces infectivity), maintaining or strengthening the existing capacity for testing, treatment initiation, and long-term ART maintenance will also be critical to achieving further reductions in seroprevalence. Sustaining this effort, particularly with the policy of free treatment in place, may be challenging for the government of Ivory Coast and its partners. As budget considerations increase among donor countries, an increased focus will be placed on sustainability strategies that require increased support from local sources. Even under the existing terms of the partnership with the government for the provision of ART, government investment will have to increase since it has to provide drugs for all HIV cases requiring third-line therapies. Depending on how quickly resistance develops to first- and second-line drug therapies, the government will have to spend more in procuring higher line drugs and providing the necessary support for patients on these drugs.

Strategies to increase sustainability through leveraging of local resources would benefit from considering the following options:

- **Leveraging facilities in the private commercial sector**: Currently, nearly all of the costs of accredited treatment sites are supported by the government or donors. Using private commercial sites to deliver ART or testing will permit leveraging of private resources and create a mechanism through which patients pay some share of the costs either out of pocket or through existing health coverage.
- **Returning to user fees for drugs or services**: In the long term, the government may consider a return to a system of collection of user fees when drugs or services are

supplied. This would have to be managed carefully to avoid impacting health-seeking behavior and would likely have to be accompanied by other health financing schemes to increase coverage for health costs and to ensure the poor maintain access to essential services.

One of the drawbacks of declaring an entitlement of free treatment is that public funds are used to subsidize treatment for people who do not need the subsidy. Employees in the formal sector generally benefit from good health insurance coverage.[11] If the government were to limit provision of free ART to citizens without health insurance, financing for HIV and AIDS would be leveraged from insurers, employers, and employees. As the economy continues to recover and more people are employed in the formal sector, this is a source of funding that cannot be overlooked.

To illustrate the impact of such a change, the assessment team used a simple, linear model developed by Boston University to project how many cases the private sector could take up and what the cost savings to the public sector would be. To be conservative, the team assumed that prevalence would stay near the current level of 3.7 percent with employees in the formal sector having a prevalence of 3 percent and other adults having a rate of 4.3 percent. These projections assume that private for-profit providers treat all ART patients working in the formal sector, including employees' dependents, and that all costs of treatment are covered by some combination of employers, insurers, and employees. Using the assumptions detailed in Annex A, by the end of 10 years, the private sector would be treating between 59,000 and 133,000 cases and saving between $255 and $579 million for the public sector. Because the growth of the formal sector is critical to how much of the treatment burden the private sector can take up, the team modeled three different scenarios with the assumptions shown in Table 3.

TABLE 3: MODEL ASSUMPTIONS FOR DIFFERENT SCENARIOS

Variable	Optimistic	Realistic	Pessimistic
Formal sector growth rate	6%	4%	2%
Percentage of formal sector workers insured	90%	75%	60%
Average number of adults insured per worker	1.9	1.7	1.5

Figures 4 and 5 show the projected share of ART cases and costs between the public and private sectors under the realistic scenario. The optimistic and pessimistic scenarios are presented under Annex A.

[11] According to data provided by the Association of Private Clinics of Ivory Coast (ACPCI), the share of the total population of Ivory Coast that is covered by some kind of health insurance is estimated at 10 percent.

FIGURE 4: PROJECTED GROWTH IN ART CASES

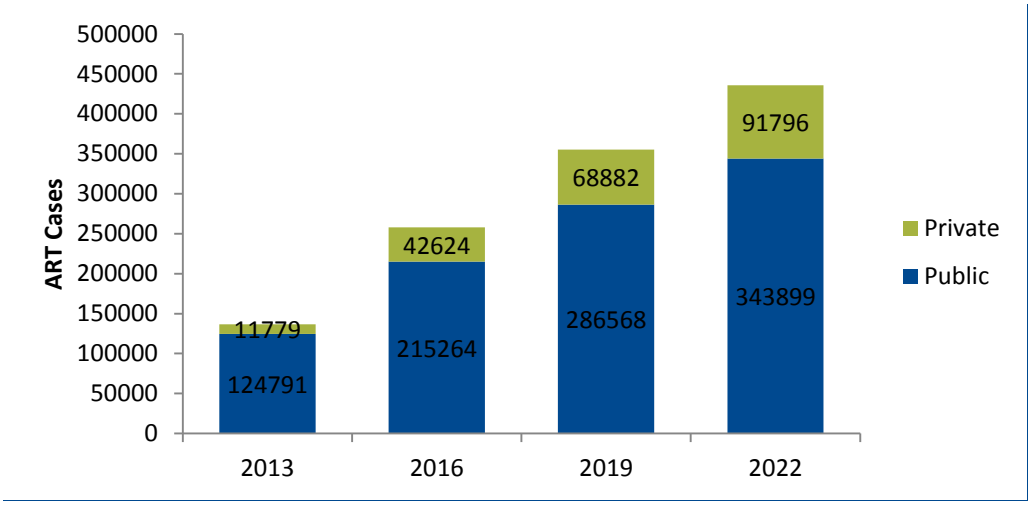
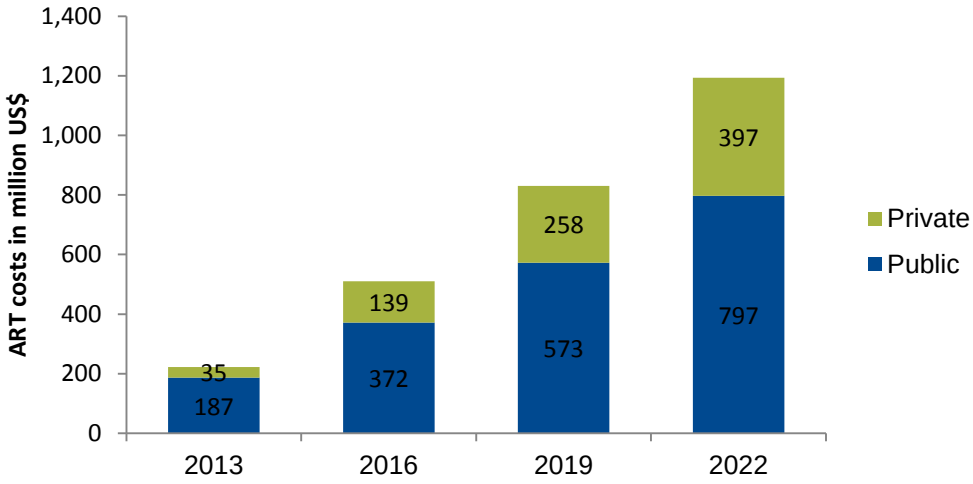


FIGURE 5: PROJECTED ART COSTS



I.2 SCOPE OF THE ASSESSMENT

Seeking guidance on the strengthening of HIV and AIDS services across the public and private sectors, PEPFAR commissioned a private sector assessment (PSA) through the SHOPS project. The assessment is designed to help guide the government of Ivory Coast and PEPFAR's strategy and future investments in health systems strengthening in Ivory Coast. Consistent with current PEPFAR legislation, the assessment hopes to identify ways to improve efficiency and sustainability in the HIV and AIDS response through greater leveraging of private health sector expertise, infrastructure, and resources.

The assessment questions and key informant selection were guided with a view to covering the six health systems pillars according to the WHO: governance, information, services, human resources, health financing, and medicines and technologies. Because the assessment focused on HIV and AIDS, the team did not explore in-depth the various health systems issues as would be the case in a broader health systems assessment or PSA. Analysis was limited to health systems issues that would impact the private sector and/or the participation of the private sector in the response to the HIV and AIDS epidemic.

To this end, the assessment documented and evaluated several key components of health services provision in the private sector, including the following:

1. Private health sector stakeholders and their roles
2. HIV- and AIDS-related details on the flow of patients/clients, service cost, health care providers, and commodities and data between the private and public sectors
3. The location and density of private sector facilities and the services they offer, especially those related to HIV and AIDS, as well as the supply and demand for private sector provision of HIV- and AIDS-related health products and services
4. The level of policy dialogue between the public and private health sectors
5. Existing and potential opportunities for public-private partnerships (PPPs) in health that can increase efficiency and sustainability to the response to control the HIV and AIDS epidemic in Ivory Coast
6. Recommendations on how best to operationalize a select number of PPPs focusing on partnerships between the U.S. Government/PEPFAR and mobile phone operators in Cote d'Ivoire. (Refer to Annex B for the complete scope of work.)

2. METHODOLOGY

The assessment team began the PSA by scanning available published and gray literature pertinent to the objectives of the assessment and implementing a thorough literature review. The literature review helped to inform the assessment, with an emphasis on better understanding the private sector's current and potential contribution in health services provision, particularly HIV and AIDS services, through a health systems strengthening framework. To understand the political, economic, and social landscape of Ivory Coast, the assessment team reviewed topics such as health policy and legislation, the Demographic and Health Survey (DHS), the AIDS indicator survey, the health care system, health insurance, and National Health Accounts (NHA) data. The literature review revealed several potential opportunities for increased stewardship of the public sector, involvement of the private sector, and collaboration between the sectors.

Stakeholder interviews were deemed crucial to understanding salient and prevailing attitudes held by public and private sector actors, donors, and implementers. These interviews were essential to identifying existing constraints and challenges as well as potential solutions. The assessment team developed interview guides tailored to each stakeholder group and conducted the first phase of key informant interviews between October and November 2012. A second phase of interviews was conducted from March 10–25, 2013, to further inquire into and/or confirm some of the initial findings. Stakeholders included government officials, USAID/PEPFAR staff, implementing partners, financiers, private health providers, private providers' associations, workplace programs, NGO/faith-based organization (FBO) representatives, mobile phone operators, industry representatives, and others.

The team selected private providers with the objective of obtaining contributions from a range of private providers, scopes of practice, and geographical areas. Interviews were conducted in the regions of Abidjan, Yamoussoukro, Bouake, Aboisso, and Abengourou. The sample did not include private providers operating in primarily rural areas. Based on lists of providers, very few private providers (even nonprofit ones) operate in a strictly rural environment. The assessment team met with workplace service providers, providers from nonprofit organizations and FBOs, as well as private for-profit providers. In all, the following stakeholders were contacted:

- Public/government: 23
- Private facilities:
    - Private commercial: 12
    - Workplace clinics: 4
    - NGOs (service providers): 15
    - FBOs: 7
    - Insurance: 2
- Private pharmaceutical: 5
- Donors/NGOs: 22
- Professional associations: 7
- Other (mobile phone operators): 2

The complete list of interviewees is included in Annex C.

3. DESCRIPTION OF THE PRIVATE HEALTH SECTOR IN IVORY COAST

This section provides a description of the private health sector based on the data available. Areas covered are the type of facilities, their geographic distribution, and the types of services offered, especially with respect to HIV and AIDS.

3.1 ORGANIZATION OF THE PRIVATE HEALTH SECTOR

Classification of Private Facilities

The private health sector is divided into the for-profit sector, the nonprofit sector (both faith based and association based), a social protection sector (workplace-based clinics, *mutuelles,* and insurance), and traditional medicine. The main law that regulates the private health sector is the decree No. 96-877 of October 1996, which provides the classification, definition, and organization of private health facilities. This decree recognizes the following types of facilities in the private health sector:

- Medical facilities, including polyclinics, clinics, medical imaging centers, functional exploration centers (biological analysis and pathological monitoring centers), and offices of medical experts
- Pharmaceutical facilities, including retail pharmacies, *dépôts* pharmacies (which are linked to pharmacies and sell a more restricted range of medicines), wholesalers, and production units
- Laboratory of biological analysis
- Paramedical facilities such as nursing centers, village health huts, prenatal and post-natal examination facilities, maternities, audio prostheses facilities, physical therapy centers, podiatry facilities, orthopedic facilities, psychotherapy facilities, optician facilities, dental prostheses labs, and pedicure and manicure facilities
- Socio-sanitary facilities such as centers for consultation and ambulatory care
- Facilities for alternative medicine such as traditional medicine, centers of herbalists, dietetic centers, and acupuncture facilities.

The organization of the private health sector also follows criteria according to the national health pyramid. The 1996 decree defined three levels within the private health sector as follows:

- **Level 1**: Nursing centers, centers for prenatal and post-natal care, and medical centers that provide the most basic care and consultation but which must refer to level II or level III facilities for more complex conditions.
- **Level II**: Specialist medical centers, medical offices, medical clinics, and

laboratories, which include medical imaging, dental offices, and other specialists.

- **Level III**: Polyclinics that provide consultation and hospitalization for general medicine, general surgery, pediatrics, obstetrics and gynecology, and other specialties.

3.2 NUMBER AND DISTRIBUTION OF PRIVATE PROVIDERS AND FACILITIES

Despite the challenges of collecting statistics on the private health sector, the Directorate of Information, Planning and Evaluation (DIPE) conducted a survey of all health facilities in 2010. These findings, as summarized in Table 4, indicate that private facilities represent 51.63 percent of the total number of all health facilities in Ivory Coast—49 percent in the private for-profit sector and 2 percent in the nonprofit and faith-based sector.

TABLE 4: SUMMARY OF PUBLIC AND PRIVATE HEALTH FACILITIES (2010)

Type of Facility	Number	Percent
Public sector health facilities 2009–2010	1887	45.63
Semi-public facilities and institutions	11	0.27
Public health sector administrative services 2009–2010	102	2.47
Authorized private health facilities (2009)	554	13.40
Unauthorized private health facilities	1482	35.84
Private faith- and community-based health facilities	99	2.39
Total	4135	100

Source: Répertoire des Structures Publiques et Privées de Cote d'Ivoire, DIPE (2011)

The breakdown of the types of private facilities and their evolution since 2008 is shown in Table 5.

TABLE 5: TYPES OF PRIVATE FACILITIES: 2008–2010

Private Health Facilities	Number by Year	
	2008	**2010**
Polyclinics	15	13
Clinics	182	136
Nursing centers	556	964
General medicine and OB/GYN offices	227	114
Dental offices	Not surveyed	101
Laboratories	11	20
Radiology centers	4	4
Chinese clinics	36	67
Ambulatory care centers	Not surveyed	4
Hemodialysis centers	Not surveyed	1
Osteopathy centers	Not surveyed	2
Miscellaneous care units (counseling centers, homeopathic offices, etc.)	Not surveyed	147
Workplace health centers	463	463
Total	**1494**	**2036**

Source: Répertoire des Structures Publiques et Privées de Cote d'Ivoire, DIPE (2011)

Workplace health centers are defined as treatment centers in the workplace that employ full- or part-time qualified medical and/or paramedical personnel to diagnose or treat employees and, in some cases, their families. Although their number has not grown in recent years as more companies choose to contract with existing clinics and polyclinics, they still play an important role in the provision of care in the private sector.

Table 6 shows the distribution of private facilities by region as of 2006. Geographic distribution has not been updated as of 2010. As one would expect, there is a great concentration of private facilities in urban areas, especially in Abidjan (Lagunes). Although all regions have some private facilities, it is worth investigating why more private facilities have not been established in certain regions (e.g., in Worodougou, Savanes, and Montagnes). The lack of a sufficiently large population with insurance coverage or purchasing power would be the most likely explanation, but other factors may discourage investment of private providers in these areas. The political conflict, and its related insecurity, is another factor that may have reduced the presence of private facilities in these regions and indirectly contributed to their growth in Abidjan as qualified providers may have moved their practices to the south.

TABLE 6: GEOGRAPHIC DISTRIBUTION OF PRIVATE FACILITIES BY REGION 2006

Regions*	2006
Agneby	17
Bas Sassandra	271
Denguele-Baffing	2
Fromager	30
Haut Sassandra	38
Lacs	27
Lagune 1	284
Lagune 2	389
Marahoué	22
Montagnes	1
Moyen Cavally	2
Moyen Comoé	28
N`Zi Comoé	10
Savanes	3
Sud Bandama	45
Sud Comoé	23
Vallée Bandama	15
Worodougou	0
Zanzan	5
Total	**1212**

Source: Répertoire des Structures Publiques et Privées de Cote d'Ivoire, DIPE(2011)*Health designation prior to Decision 0009/MOH of February 2, 2012 on health region directorates.

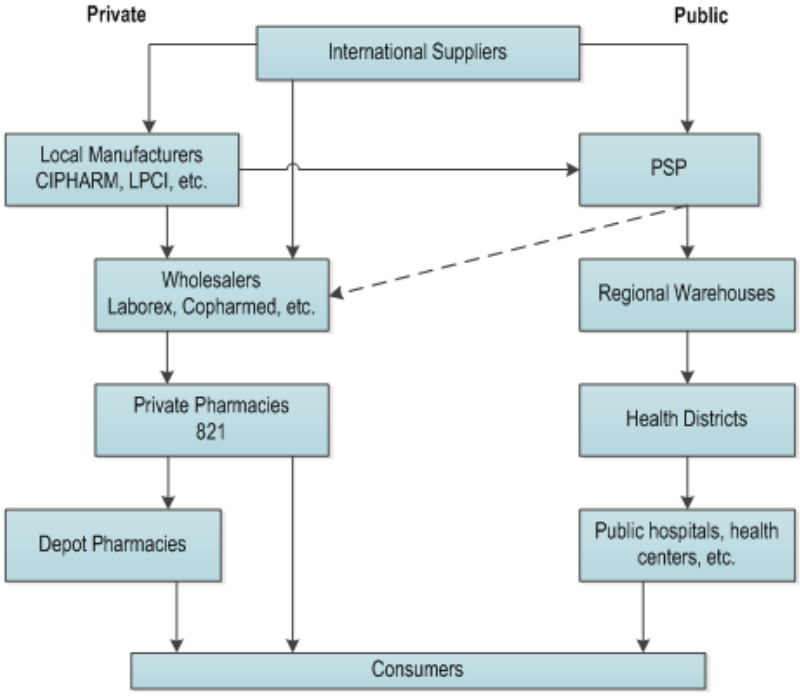
Private Sector Supply Chain

A description of the private health sector would not be complete without describing the pharmaceutical sector and the supply chain for medicines, medical supplies, and other health commodities. Overall, this sector performs at a high level in terms of ensuring the quality of the medicines it supplies, delivering to pharmacies and district pharmacy stores in a relatively timely manner, and practicing good stock management.

Ivory Coast also has a growing pharmaceutical manufacturing sector that meets Good Manufacturing Practices (GMP) standards and supplies a share of drugs for national consumption. The Ivorian pharmaceutical sector hopes to expand its share of locally produced drugs in the overall consumption. *Côte d'Ivoire Pharmacie* (CIPHARM) is the oldest and largest of the Ivoirian manufacturers, but at least seven other manufacturers have joined CIPHARM to create their own professional association—the Association of Pharmaceutical Producers of Ivory Coast (APPCI), which includes CIPHARM, OLEA, LPCI, LICPHARMA, ROUGET, PHARMIVOIRE, DERMOPHARM, and GALEFORM. Of these, four have GMP certification: CIPHARM, OLEA, LPCI, and LICPHARMA. None of the Ivoirian manufacturers has WHO manufacturing accreditation. The APPCI was created to promote Ivoirian pharmaceutical manufacturing, ensure high-quality practices, and fight against low-quality or counterfeit drugs that appear in the market. Currently, according to CIPHARM, local manufacturers supply only 4 percent[12] of the medicines consumed in Ivory Coast and the association hopes to increase that share to 30 percent in the next four to five years. Currently, CIPHARM and other manufacturers produce Cotrimoxazole for the PNPEC, and they are interested in producing drugs for HIV and AIDS, including ARVs. In the opinion of informants, Ivory Coast has fairly good controls on the quality of imported drugs and restrictions on who can import, distribute, and sell pharmaceutical products. The only weakness cited in the system is in post-marketing surveillance, and this is due to the limited resources of the Directorate of Pharmacy and Medicines (DPM) and the National Public Health Laboratory to test samples.

Figure 6 illustrates the distribution and circulation of drugs and pharmaceutical products.

FIGURE 6: PHARMACEUTICAL SUPPLY CHAIN IN IVORY COAST



Source: Information gathered through PSA interviews, adapted for PSA report.

[12] According to the 2008 NHA, in monetary value, 10 percent of health spending on drugs came from local production.

Once drugs have been approved for sale on the Ivoirian market, they are procured through international manufacturing sources or local manufacturers. Pharmaceutical wholesalers (Laborex, Copharmed, and others) have established supplier relationships with international manufacturers, but they also procure and sell generic products in addition to higher margin, branded drugs. These wholesalers obtain and track consumption data from the more than 800 pharmacies they serve, enabling them to maintain minimal stocks and ensure just-in-time delivery to the pharmacies. Resupply to any pharmacy in the country takes place within 24 hours of a pharmacy placing an order, and within the major towns, resupply occurs usually within 4–6 hours.

The DPM must authorize the establishment of private pharmacies to ensure there is no overconcentration of pharmacies in urban areas. While in theory this system should help to ensure some efficiency and equity in the market, in practice some pharmacists complain that regulation mandating minimum distances between pharmacies are not respected and rural areas remain underserved. The health system has established a lower tier pharmaceutical retail outlet called "*dépôts,*" which are designed to serve more rural areas but do not require the full-time presence of a pharmacist. The creation of *dépôts* is also subject to regulatory approval, but it requires a pharmacist to initiate the investment and take responsibility for supervising and resupplying the depot.

On the public sector side, the Public Health Pharmacy (PSP) is a parastatal entity (*Etablissement Public à Caractère Industriel et Commercial*) that has the responsibility for procuring and distributing medicines and pharmaceutical products to the public sector. PSP's responsibility for these drugs ends when they are delivered to health district pharmacy stores, who must then manage the stock, distribute to individual health facilities, and conduct forecasts and place orders for resupply. Currently, largely because of major financial and institutional challenges, PSP is undergoing major reforms. In June 2013, a new structure called the New PSP Côte d'Ivoire was legally established as a nonprofit association. The government, donors, pharmacists, doctors, professional associations, and the civil society are members of the association, which will be governed by a board of directors and a supervisory committee.

It is not yet clear how the new PSP will overcome the challenges faced by the old PSP. These challenges include the government's slow payment to PSP. The Ministry of Finance releases PSP's annual budget allocations to the MOH where they are held as part of the national budget. Current estimates are that the national treasury owes PSP approximately CFA 8 billion for past operations and procurement, although this number could be even higher given that in 2012, PSP was owed more than CFA 3.5 billion for ARVs alone (the 2008 NHA estimated the funds owed to PSP by the treasury at CFA 13 billion). Because of the government's inability to release funds to PSP in a timely manner for drugs procured for the public sector, several vendors are prohibiting PSP from ordering due to nonpayment of accounts. Challenges in sourcing alternate procurement options and PSP's inability to invest in warehouses, delivery vehicles, or in updated information technology, have significantly limited PSP's ability to perform to its full capacity. Although central stock-outs of drugs are reported as minimal, PSP's performance in local stock management and delivery is reported as a major challenge. In addition, PSP lost seven vehicles to vandalism in the 2010 political crisis, stretching the capacity of its aging

existing vehicles. PSP deliveries occur on a monthly basis, focusing each week on deliveries in each of the four PSP national quadrants. Providers report problems with delays in delivery and local stock-outs due to weak forecasting and procurement. Typically, the district pharmacy will hold a 'buffer stock' of common medicines to replenish individual facilities in periods of stock-out, however, the logistics of resupply can take up to seven days on average. While there were reportedly no stock-outs of ARVs at central level in 2012, stock-outs of individual drugs at the local level still occur due to weak forecasting and procurement by local pharmacy leadership. It is reported that although single drug stock-outs continue to occur, this has not led to treatment interruption or the need for regimen changes. In some cases, providers substitute constituent drugs when combination drugs are out of stock.

Interviewees highlighted that the private health sector has in many ways been able to maximize efficiencies in stock procurement and distribution, albeit for lower volumes and largely for urban distribution. As such, PSP leadership stated that, dependent on the outcome of the current PSP reform, a strong area for private sector outsourcing may be in contracting all or some of PSP's transport and distribution functions.

For the national AIDS control program, PSP has been charged with distributing ARVs and other supplies to all 477 treatment centers accredited by PNPEC. One of the challenges for PSP in implementing this program has been the requirement that ARVs and other HIV medicines be distributed free of charge. For other drugs in the PSP system, collecting a user fee from patients has been a way of ensuring fairly accurate counts of drugs received and revenues collected. Each facility retains a share of these user fees to cover operating expenses. Since fees are not collected for ARVs or other opportunistic infection drugs, PSP has struggled to get accurate counts of stocks from health districts, and such counts are necessary to forecast supplies and plan orders. Although PSP is technically a public sector entity, it has no authority over the pharmacy staff of the health districts. As a result, a large share[13] of the PNPEC sites have experienced a stock-out with an average duration of 10 days. PSP is receiving technical support from USAID's Supply Chain Management System (SCMS) program to help address these problems. It should be noted that there is no evidence that the stock-outs of ARVs lead to patients going without treatment. When one ARV is out of stock, alternative ARV drugs have been available.

Very little connection currently exists between the two parallel public and private supply chains. PSP does sell limited quantities of drugs through the pharmaceutical wholesalers, but to date has not considered contracting out its distribution functions to the private sector, in spite of the private sector's superior performance. PSP believes that institutional reform and increased investment in logistical capacity will improve its logistical performance to an acceptable standard. The private wholesalers, on the other hand, believe they could do a better job than PSP in managing and delivering stocks in general and in supplying the HIV and AIDS programs in particular. However, these wholesalers also acknowledge that they would be reluctant to bid for a contract with the government if payment guarantees were not put in place. Both private wholesalers and pharmacists say they could accommodate a program of free distribution,

[13] Informants at PSP estimated the share at 50 percent, but supervision by SCMS in 2012 revealed 32-35 percent stock-outs.

provided some administrative cost was paid for handling and storage of drugs. They also were critical of the AIDS program for confiding storage and distribution of ARVs to NGOs who, in their view, were not qualified to handle such tasks.

As with the clinics, the distribution of the 821 private pharmacies is also inequitable. In 2010, the two regions around Abidjan (Lagunes 1 & 2) accounted for 514 (or 63 percent) of the 821 private pharmacies that exist in Ivory Coast. Table 7 shows the distribution of private pharmacies throughout Ivory Coast.

TABLE 7: DISTRIBUTION OF PRIVATE PHARMACIES BY REGION IN 2010

Regions*	Number of Pharmacies
Agnéby	21
Bas Sassandra	44
Denguelé-Bafing	3
Fromager	17
Haut Sassandra	32
Lacs	20
Lagunes 1	212
Lagunes 2	302
Marahoué	12
Montagnes	16
Moyen-Cavally	9
Moyen-Comoé	14
N'Zi-Comoé	14
Savanes	22
Sud-Bandama	19
Sud-Comoé	14
Vallée du Bandama	41
Worodougou	2
Zanzan	7
Total	**821**

Source: Répertoire des Structures Publiques et Privées de Cote d'Ivoire, DIPE (2011)

*Health designation prior to Decision 0009/MSLS of February 2, 2012 on health region directorates.

3.2.1 HUMAN RESOURCES IN THE PRIVATE HEALTH SECTOR

Human resources for health include the total number of persons in a wide range of socioprofessional categories who are responsible for the promotion and restoration of health as well as the prevention of disease. According to the MOH's Human Resources Directorate (DRH), the health professionals in Ivory Coast are divided between the public and private sector, as shown in Table 8.

TABLE 8: HEALTH PROFESSIONALS BY SECTOR (2007)

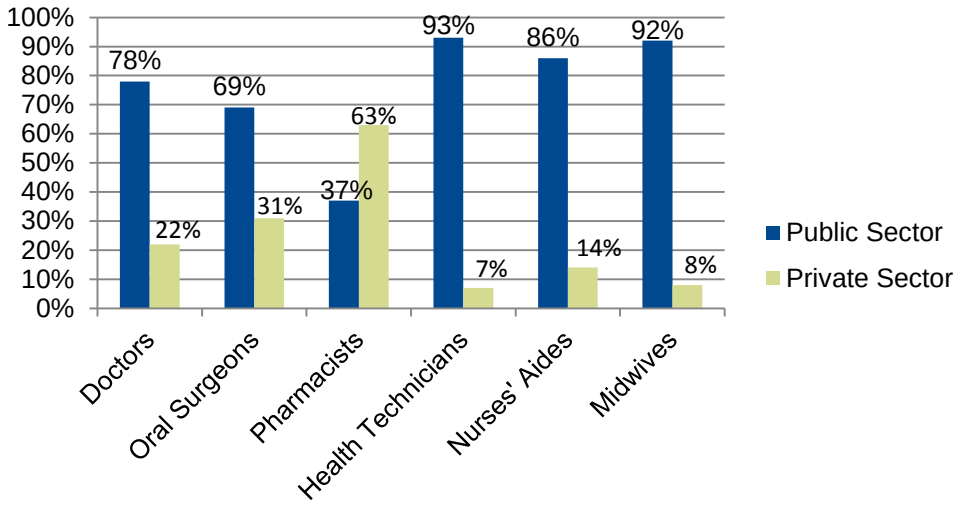
Professional Category	Public Sector	Private Sector
Doctors	2746	790
Oral surgeons-dentists	274	125
Pharmacists	413	718
Health technicians	1419	112
Nurses	6973	1173
Midwives	2258	184
Nurses aides	568	NA
Subtotal medical professionals	**14651**	**3102**
Administrative and social staff	2561	N/A
Temporary staff	2572	N/A
TOTAL	**19784****	**3102**

Source: MOH (2007)

**This total does not take into account medical personnel in the army, the police, or those working in public sector's health insurance and in various administrative positions in private health insurance companies.

The relative proportion of health professionals within the public and private sectors is shown in Figure 7.

FIGURE 7: DISTRIBUTION OF HEALTH PROFESSIONALS BETWEEN PUBLIC AND PRIVATE SECTORS (2007)



Source: MOH/ DRH/DEPS data, 2007; adapted for PSA

It should be noted that the DRH has not updated statistics on health professionals in the public and private sectors since 2007. The actual numbers are expected to be significantly higher than last recorded. For example, when the assessment team consulted with the National Order of Ivory Coast Doctors (ONMCI), they estimated the current total number of doctors to be 5,500, significantly higher than the 3,536 reported in 2007. One must also use caution in interpreting these statistics as they are largely based on the registration records of various health professions, which are not always updated regularly. Many health professionals remain registered with their order or association even if they no longer exercise their health profession or have left the country. Many providers will declare the sector they are working in at the time of registration, but will not update these records when they leave the public sector to work in the private sector. Table 8 does not capture other people working in the health sector such as herbalists or traditional healers, which the MOH estimates to be around 8,500.

A major confounding factor that numerous informants mentioned is the frequency of “dual practice” in which providers work in both the public and private sectors. Nearly all private health facilities the assessment team visited acknowledged that they hire doctors and other health professionals who also work in the public sector. Key informants estimated that up to 70 percent of physicians and 50 percent of other health cadres are engaged in dual practice during either their public hours or their off hours and vacation. Public sector providers cited low public sector wages that do not permit them to maintain a standard of living commensurate with their education as one reason why they spend a large share of their off hours earning supplemental income from private facilities. The government’s tolerance of double practice began in the late 1970’s as a response to strike threats by public sector doctors who demanded significant salary increases. Instead of a general salary increase the national budget could not afford, the government agreed to allow public sector providers to practice in the private sector two days per week once the doctors satisfied their required hours in the public sector.

However, as the situation has evolved many physicians abscond from their public posts to work in the private sector during their public hours. This is especially the case in Abidjan where some public facilities have a surplus of physicians. Physician specialists are the health professional most likely to engage in dual practice, because they can provide high-cost and complex services according to their specialty. Although nurses and pharmacists are also engaged in dual practice, the nature of their daily workload lends itself to moonlighting rather than absconding from public posts. In terms of national and most facility-level regulations, provided they do not abandon their posts during their normal public sector working hours, health providers are not regulated by any legislation preventing them from engaging in dual practice. Such a practice is widely accepted and tolerated despite several known negative effects on the health system.

TEXT BOX: IMPACT OF DUAL PRACTICE IN IVORY COAST

Several PSA key informants estimated that as much as 70 percent of Ivory Coast's physicians (in particular, specialists) are engaged in some form of dual public and private employment. The overall impact of this was described as 'largely negative,' although this negative impact is perhaps more so due to loose regulations and minimal efforts to mitigate the negative impacts of dual practice.

Negative impacts include the following:

- Absence of physicians and specialists from public posts increases wait times, reduces quality of services, and wastes public resources.
- Reports have been made of purposeful reduction in public sector quality and patient neglect to promote private sector demand.
- Experienced health staff are often pulled to private sector, leaving more inexperienced personnel in the public sector.
- Absence of experienced colleagues further demotivates public sector personnel and reduces service quality.
- Absence of experienced physicians negatively impacts training and mentorship of public sector personnel.
- Often specialist services are only available in the private health sector, and there is an overall lack of specialist availability in public settings.
- Some public sector physicians are recruiting patients from public practice and self-referring to their private practice, typically for chronic or expensive treatments that guarantee income. This can negatively affect patients if treatment is unnecessary or overly expensive.
- Some private providers may be sourcing supplies and medicines from the public sector, causing slippage of public sector resources into private settings.

If effectively regulated, dual practice can have the following positive impacts:

- The extension of private sector facilities by dual practice physicians can be important service delivery access points.
- Physicians and specialists are retained within the country due to financial incentives offered through permitted dual private practice.
- Providers can improve their skills and work habits in private facilities where quality assurance systems are stronger and management ensures greater accountability.
- More formal regulation of dual practice physicians can positively impact public-private communication and improve continuity of care.
- Co-location of public and private practice can supplement the costs of public care while incentivizing retention of physicians in public settings.
- Allowance of specialist leasing or other public sector retention efforts can promote dual practice as a way to increase the availability of public sector specialist services.

According to a 2006 human resource for health evaluation, the proportion of health services provided by public providers working in the private sector is estimated to be between one-third and one-half of all services provided in the private health sector (Lee et al. 2006). Many of the private sector ARV treatment sites are managed by FBOs or NGOs who employ lab technicians, doctors, or nurses who are also employed in or come from the public sector.

3.3 RANGE OF SERVICES OFFERED IN THE PRIVATE SECTOR

In general, the private health sector offers the same range of general medical services that the public sector offers in Ivory Coast. This section compares the public and private sectors in the supply of key services, especially for HIV and AIDS.

Consultations

According to the annual health statistics, in 2011, approximately 7,215,897 consultations were recorded in Ivory Coast, which, assuming one consultation per individual, means 32 percent of the population received a health consultation. However, because of the poor reporting of health data from the private sector, especially the private for-profit sector, it is possible the actual number of consultations could have been much higher if private sector consultations were accurately recorded.

Hospitalization

Of the approximately 4,065[14] beds available for hospitalization in Ivory Coast in 2011, more than 1,000 were found in private sector facilities (MOH/DIPE 2011). As with other health statistics, the private sector may not be capturing all of the data; in this case, beds in recently opened facilities that are not registered or not reporting to the DIPE would not have been included.

HIV and AIDS Services

The assessment team considered the following services in HIV and AIDS: HCT, PMTCT, laboratory support for ART, and ART services. Although nonclinical care and support services and interventions to support orphans and vulnerable children are often provided in the private sector, particularly by nonprofits and FBOs, they were not considered in this analysis since the work of NGOs is better known and understood than the private commercial sector. A provider was considered to offer HCT if he or she provides an HIV test in accordance with national norms and has staff trained in counseling who provide post-test counseling. Provision of PMTCT is defined as providing HCT to pregnant women and, when a patient is declared positive, offering prenatal counseling, and providing an appropriate PMTCT ARV intervention to the mother and to the infant following delivery, according to national norms. ART involves providing ARV drugs, managing side effects, monitoring cluster of differentiation 4 (CD4) levels, and counseling according to national norms. Laboratory support for ART involves CD4 testing.

The latest information from the PNPEC in 2010 shows that the private sector is playing a significant role in the provision of HIV and AIDS services, especially for HCT and in the provision of ART, although most of the service provision is taking place in the NGO, community-based and faith-based sectors. Table 9 shows the provision of HIV and AIDS services by sector.

[14] MOH/DIPE, Annuaire des Statistiques Sanitaires, 2011

TABLE 9: PROVISION OF HIV AIDS SERVICES BY SECTOR IN 2010

Type of Facility	CT	PMTCT	ART	Lab with CD4
Public	641	559	387	106
NGO	15	6	5	10
Community-based	63	31	33	8
Private for-profit	4	2	4	2
Faith-based	25	20	27	7
Workplace	19	11	12	5
Total	**767**	**629**	**468**	**138**

Source: PNPEC – Informal communication

Although the assessment team was not able to obtain the geographic breakdown of the 2010 data, the data from 2008 show that the 78 private sector sites are spread unevenly throughout the country, with some regions having no private facilities and Abidjan and its surrounding areas having a strong concentration of private sites, as shown in Table 10.

TABLE 10: REGIONAL DISTRIBUTION OF PRIVATE FACILITIES OFFERING HIV AIDS SERVICES (2008)

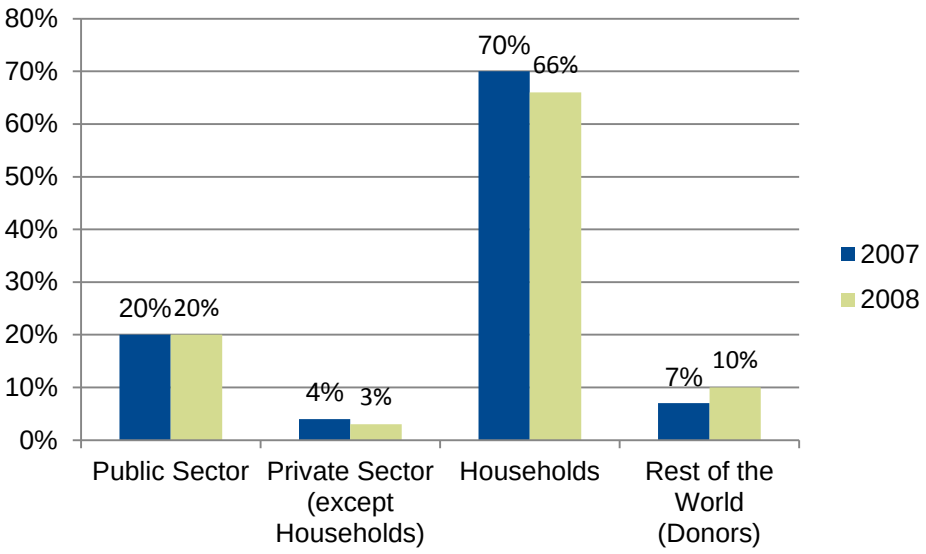
Regions*	HCT	PMTCT	ARV Site	Lab CD4
Agnéby		1	2	1
Bas Sassandra		4	1	3
Denguelé-Bafing		2	2	
Fromager	5	1	4	3
Haut Sassandra		3	2	2
Lacs		1	2	3
Lagunes 1	1	15	17	5
Lagunes 2	6	20	24	10
Marahoué		2	3	
Montagnes			1	
Moyen-Cavally		1	2	
Moyen-Comoé		1	1	
N'Zi-Comoé		1	4	2
Savanes	1	4	4	1
Sud-Bandama		1	1	
Sud-Comoé		2	2	
Vallée du Bandama		3	5	2
Worodougou		1	1	
Zanzan				
Total	13	60	78	32

Source : Répertoire National des Structures de Prise en Charge des Personnes Infectées par le VIH, 2008
* Health designation prior to Decision 0009/MSLS of February 2, 2012, on health region directorates.

3.4 PRIVATE SECTOR HEALTH FINANCING AND EXPENDITURES

According to the NHA analysis of 2008, the total health expenditure (THE) in 2008 was CFA 613,406,905,505, or an annual per capita expenditure of CFA 29,827 (US$ 66), which is comparable to health spending in other lower income countries but below the average of $84 of per capita health spending in all of sub-Saharan Africa.[15] Unfortunately, the share of total health spending from households was 66 percent (down from 70 percent in 2007), which is still relatively high, particularly for a country that has a policy of state provision of health care. Essentially, all of the reduction in the burden on households came from external funding, as public sector's contribution to health financing remained at the same level, as shown in Figure 8. Figure 9 provides the sources and agents of health financing in 2008.

FIGURE 8: SHARE OF TOTAL HEALTH SPENDING IN IVORY COAST (FROM 2007 TO 2008)



Source: National Health Accounts (NHA) 2008

FIGURE 9: SOURCES AND AGENTS OF HEALTH FINANCING IN 2008

	Public	Private (Including Households)	Rest of the World
Sources of financing[16] in billions	101.90	432.30	79.2
Financing agents[17] in billions	122.10	427.00	64.3
Share of total health expenditure for sources	16.6%	70.5%	12.9%
Share of total health expenditures for agents	19.9%	69.6%	10.5%

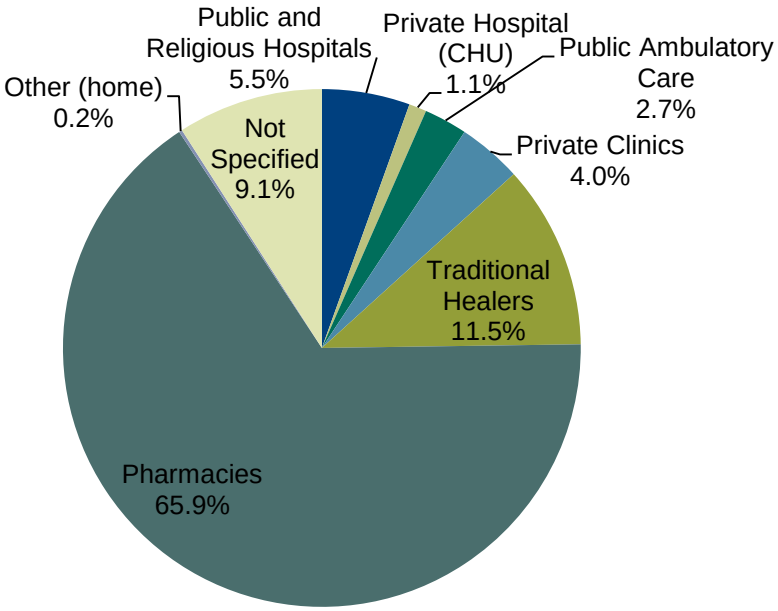
Source: NHA 2008

[15] http://www.tradingeconomics.com/sub-saharan-africa/health-expenditure-per-capita-us-dollar-wb-data.html
[16] Sources of financing are entities such as the Ministry of Finance, donors, and households that provide funds.
[17] Financing agents are the entities that actually purchase the health goods or services.

Household Spending

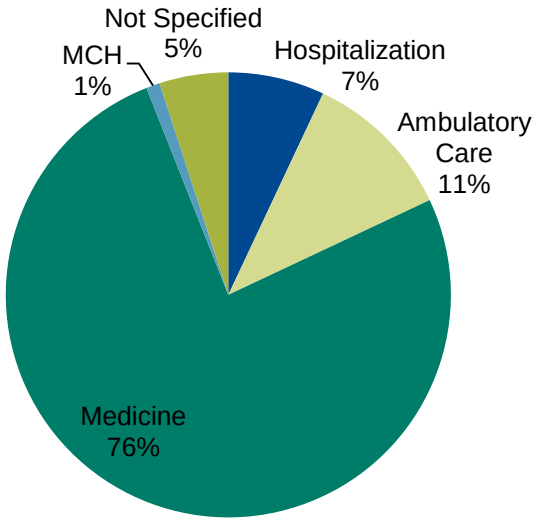
Clearly, the largest contributor to health financing is coming from households, and Figure 10 shows that most of that expenditure (66 percent) is for medicines purchased at private pharmacies. A relatively small share (4 percent) is going to private facilities. A much larger share is going to providers of traditional medicine (11.5 percent). This pattern is consistent with Figure 11, which shows that consumers are mostly spending their money on medicines (76 percent).

FIGURE 10: SHARE OF HOUSEHOLD EXPENDITURES BY TYPE OF PROVIDER



Source: NHA 2008

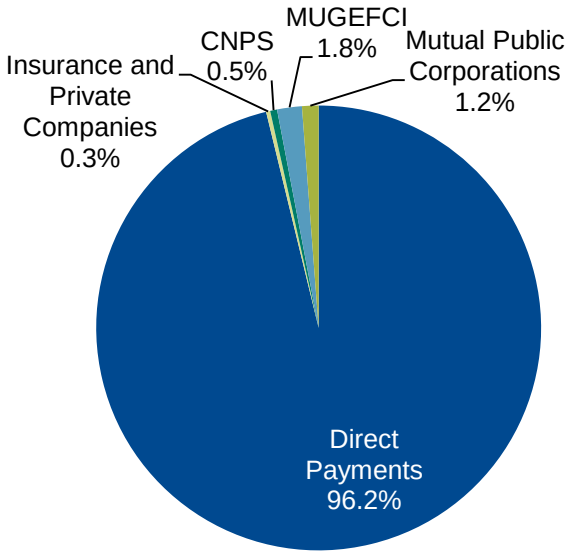
FIGURE 11: Consumer Out-of-Pocket Expenditures



Source: NHA 2008

Figure 12 shows that 96 percent of household expenditures are managed by households themselves indicating an extremely high level of out-of-pocket payments and a very low level of prepayments and risk pooling. Although the *Mutuelle Générale des Fonctionnaires et Agents de l'Etat de Côte d'Ivoire* (MUGEF-CI) is the largest *mutuelle* in the country, it accounts for only 1.8 percent of household spending on health.

FIGURE 12: AGENTS OF HOUSEHOLD EXPENDITURES IN 2008



Source: NHA 2008

3.4.1 HEALTH FINANCING FOR HIV AND AIDS

Health spending for HIV and AIDS in 2008 totaled CFA 64,738,214,317, which constitutes 10.5 percent of THE. Of this amount, 88 percent came from international sources, including multinational and bilateral donors and international nonprofits (Table 11).

TABLE 11: HIV AND AIDS EXPENSES BY SOURCE OF FUNDING (2008)

Financing Source	Amount (CFA)	% THE (HIV)
Ministry of Economy and Finance	4,725,609,654	7%
Other public funds	40,696,310	0%
Employers	411,984,191	1%
Households	188,994,119	3%
National NGOs	349,583,196	1%
Other private funds	75,377,959	0%
Multilateral donors	6,689,398,190	10%
Bilateral donors	49,805,624,682	77%
International nonprofits	650,946,016	1%
THE (HIV)	**64,738,214,317**	**100%**

Source: NHA 2008

This situation is consistent with the previous NHA analysis, which showed that from 2006 to 2008, private spending on HIV and AIDS (including households) averaged 3.77 percent.

Table 12 shows that the vast majority of HIV and AIDS spending is spent in the public sector, especially for drug purchases (21 percent). Private hospitals and clinics are not separated from public facilities in the category of hospital and clinics; however, because the vast majority of treatment centers are in the public sector, it is safe to assume that the large majority of the 30 percent of HIV spending by those facilities is spent by the public sector.

TABLE 12: SPENDING FOR HIV AND AIDS BY PURCHASING AGENT

Service Providers	Amount (CFA)	% THE (HIV)
CHU	19,822,927	0%
CHR, hospitals, including faith-based	18,972,124,842	29%
Clinics and polyclinics	383,279,202	1%
Public ambulatory	2,206,801,425	3%
Public sector laboratory	287,580,000	0%
National Blood Transfusion Center	3,313,231,228	5%
Traditional healers	247,300,000	0%
PSP	13,358,088,684	21%
Pharmacies	1,466,900,000	2%
Health programs	17,027,168,203	26%
Administration in public sector	7,334,420,349	11%
Other	650,946,016	0%
Total Health Spending HIV/AIDS	64,738,214,317	100%

Source: NHA 2008

Health spending for orphans' care and PLWHA home support, psychosocial support, and community mobilization fall into the category of health programs. Also included in other health programs are prevention health programs, sex worker programs, and condoms distribution programs. According to the NHA analysis, these activities cost CFA 5,945,424,204 and 98 percent of the funding for these activities came from international donors and international NGOs.

4. LANDSCAPE OF HIV AND AIDS STAKEHOLDERS

Many organizations, varying in size and scope, play a role in the HIV and AIDS epidemic in Ivory Coast. To better understand their nature and their role in the health system, Table 13 shows the organizations by their sector (public, nonprofit and international, and private for-profit) and by the health systems strengthening block they fall under (governance, human resources, medicines and technologies, health financing, service delivery, and information). The following paragraphs provide a more detailed explanation of the information provided in the columns in Table 13.

Governance: As expected, the MOH and its divisions play the most important role in governance, both in leadership and regulation functions. Of the MOH's regulatory bodies, the Department of Professions and Health Care Facilities (DEPS) is the most important for the private sector as it is the main regulatory body. The DPM regulates the pharmaceutical sector, which includes manufacturers, pharmacies, distributors, and importers. The PNPEC is the lead organization supervising all treatment facilities for HIV and AIDS. The National Advisory Board for the Fight against AIDS (CNLS) leads the AIDS control efforts in general. The Inter-Ministerial Committee for the Fight against AIDS (CIMLS) ensures coordination with all ministries on HIV- and AIDS-related issues, and the Forum of Partners is a consultative body that provides leadership among financial and technical partners to the government.

The Council of Organizations for the Fight against AIDS in Ivory Coast (COSCI) is shown in the governance line in Table 13 for the nonprofit sector because of its contribution to ensure standards among its member NGOs. The Ivorian Network of PLWHA (RIP+) plays a similar role as an umbrella organization for all NGOs created to cater to PLWHA.

The private associations shown under the commercial column in Table 13 do not have regulatory authority over their members, but they do play a leadership role and strive to ensure best practices within their sector. The ONMCI both represents and regulates doctors as individuals, but not the facilities they work in. The ONMCI helps to ensure good moral behavior as well as technical competence. The Order of Pharmacists plays a similar role for pharmacists.

Human Resources for Health: The DRH has a leadership, planning, and regulatory role for providers in the public sector, but also takes into account the private sector in planning national human resources. The PNPEC plays a role in developing human resources through the training and supervision it offers to providers in treatment centers. COSCI and RIP+ organize training for staff of their member organizations and the private associations do the same for providers in their organizations. CIRBA also offers training in HIV and AIDS treatment for private providers.

Medicines and Technologies: The PSP does not directly regulate or control the private sector for manufacturing or the supply chain, but because PSP plays an important role in supplying medicines in Ivory Coast, it influences the market significantly. The national public health laboratory (LNSP) tests quality of medicines in the country. The other organizations shown in this column are actively involved in importing and distributing medicines and technologies, and

two of these, Ivorian Association for Family Wellbeing (AIBEF) and Ivorian Agency for Social Marketing (AIMAS), are nonprofit.

Health Financing: This column presents the main stakeholders involved in the provision of health financing, the pooling of health financing, or the purchasing of health products and services. For simplicity's sake, only the ultimate source of financing is presented rather than all of the intermediaries that use PEPFAR, Global Fund, or World Bank funds to make subgrants to local organizations.

Service Delivery: This column shows organizations from each sector that are directly involved in the provision of HIV and AIDS services, which include HCT, ART, PMTCT, and care and support for PLWHA and for orphans and vulnerable children. In the commercial sector, only four private clinics are providing ART, and workplace clinics have been providing HIV and AIDS services, including ART and prevention programs.

Health Information Systems: This function has few stakeholders, as shown in Table 13, and the low number of stakeholders reflects the low level of investment made in collecting, analyzing, and disseminating information on the private health sector and HIV and AIDS. Within the MOH, the DIPE assumes this function. The PNPEC collects routine service data from treatment centers. Outside of the government, the COSCI collects some data on the activities of its members. Other information (such as the DHS conducted by MACRO) is collected through periodic research studies by organizations such as Family Health International (FHI) and Abt Associates.

TABLE 13: LANDSCAPE OF HIV AND AIDS STAKEHOLDERS IN IVORY COAST

HSS Blocks / Sectors	Governance	Human Resources for Health	Medicines and Technology	Health Financing	Service Delivery	Health Information Systems
Public	Ministry of Health and Fight against AIDS, DEPS, DPM, PNPEC, CNLS, CIMLS, Partners Forum, CSLS	Ministry of Health/ DRH	PSP, LNSP	Government of Cote d'Ivoire, FSN	Ministry of Health and Fight against AIDS, public health facilities, Ministry of Family, Women, and Social Affairs, PNPEC	DIPE PNPEC
Nonprofit/ International	ONMCI, COSCI, RIP+	PNPEC	AIMAS, AIBEF, SCMS	Multilateral donors (Global Fund, WHO, European Commission), Bilateral donors (PEPFAR, CTB, GTZ (GIZ), AFD, JICA, CIDA, SIDA, UN agencies (UNAIDS, UNICEF, UNDP, UNFPA), Clinton Foundation, UNITAID	ACONDA, EGPAF, CARE, FBOs, local NGOs, ALLIANCE, AGPAF, FHI PSI	COSCI, FHI, MACRO, Abt Associates
Commercial	ACPCI, APPCI Ordre des Medecins, Ordre des Phamaciens	SYNAMEPCI, ONMCI	CIPHARM, Laborex, Copharmed, LPCI,	Private insurance companies (Gras Savoy, COLINA, etc.), Privates mutuelles	Private clinics, Workplace clinics (CIE, SODECI, PAA, NESTLE, etc.)	

The following sections provide additional details on the role of the stakeholders and the challenges they face.

4.1 THE ROLE OF FINANCIAL AND TECHNICAL PARTNERS

In Ivory Coast, external financing represents nearly 90 percent of financial resources for the AIDS control effort. The sources of this funding include a wide range of partners (Belgian, Swiss, and Swedish cooperation, and UNITAID). However, the HIV and AIDS landscape continues to be dominated by PEPFAR with its funding of a broad range of prevention and treatment activities. The Global Fund has also emerged as an important player, and both of these partners have made important contributions to increasing access to improved care and treatment throughout the country. At the same time, each donor's respective planning and reporting requirements have created significant challenges for governmental and nongovernmental recipients of their funding, which has led to coordination and administrative burdens.

Other multilateral donors such as the European Community, the African Development Bank, and the World Bank also make significant contributions, although the World Bank's *Programme d'Urgence Multisectoriel de Lutte contre le Sida* (PUMLS) recently ended and no long-term funding program for HIV and AIDS is under development.

Although the Global Fund's country coordinating mechanism includes some private sector members, the involvement of the private health sector in implementing HIV and AIDS activities or in providing input to HIV and AIDS strategies has been minimal, with the exception of workplace programs that the commercial sector largely funds with a minimum of community or government support. The private for-profit health sector has not been engaged by donor programs, which have focused on building the capacity of and implementing programs primarily through the government and the nonprofit sector.

4.2 ROLE OF THE GOVERNMENT

The Role of Government in HIV and AIDS Leadership

The government entity with the responsibility of leading the fight against AIDS has evolved over the years, from a central office of coordination under the Global Program (1987– 1995) to the National Program for the Fight against AIDS (1995–2001). In 2001, leadership of the AIDS response became more complicated through the creation of a new ministry within the office of Prime Minister charged with the AIDS response. The intention was to raise the profile of the fight against AIDS and to create a structure that could work with multiple ministries in addressing the aspect of the epidemic related to those ministries. However, in practice, the newly delegated ministry had insufficient resources from the government to play an active leadership role, and instead created ambiguity over its roles and responsibilities, which led to frequent confusion and struggles for implementation resources. In 2003, the "delegated" ministry was converted to a full ministry; however, at the same time, a new entity was established within the MOH for the implementation of the PNPEC. To address the growing need of orphans and vulnerable children, the MOH established a program to provide support to these groups within the Ministry of Family, Women and Social Affairs. The Ministry for the Fight against AIDS was assigned a national program for reaching high-risk groups. Other structures created with roles in the AIDS response added to the confusion: CNLS, CIMLS, the Multiparty and Partnership Committee (later became the Partners Forum), regional and departmental

committees, Technical Secretary for Coordination, Sectoral Committees for the Fight against AIDS, and the Technical Cellular for Local Initiatives under the leadership of a regional HIV advisor.

With the arrival of a new government in June 2011, the Ministry for the Fight against AIDS was closed. Although this ministry with its potential for overlapping functions was eliminated, questions about roles and responsibilities did not disappear. Most of the personnel and activities formerly housed in the AIDS ministry are now housed in a General Directorate for the Fight against AIDS, which works alongside a General Directorate for Health within the MOH, and their relative roles and authority are interpreted differently.

Role of the Government in Regulating the Private Sector

Unfortunately, none of the divisions within the government has a mandate to oversee the provision of HIV and AIDS services in the private health sector. In practice, PNPEC oversees all provision in the private sector (nonprofit and for profit). The former AIDS ministry made calls to the private sector to contribute financially to the fight against AIDS; however, no explicit effort has been made by the government to enlist the private for-profit health providers in providing HIV and AIDS services. The government has praised the workplace programs of some companies (CIE, SOTRA, and others) that took the lead in establishing high-quality prevention and treatment programs for their personnel. These facilities operate independently of the public sector system, however, and the government engagement of private commercial providers has been almost completely absent. Government interaction with the private health sector resides with the regulatory agencies that oversee the private sector in all its functions, from establishing the health facilities, to monitoring their quality of services, to reporting routine data, and even that has been inadequate. The regulatory bodies that oversee the private health sector include the DEPS, DIPE, DPM, and ONMCI. None of these bodies has oversight over the laboratory functions and systems, a key part in HIV care and treatment.

Of these regulatory bodies, **DEPS** has the most significant role. It is responsible for defining and regulating scopes of practice for all health professions except pharmacists, liaising and consulting with the professional associations, defining and ensuring the application of norms and standards of care in public and private facilities, monitoring and supervising public and private facilities, and establishing and implementing the procedures for opening new private facilities and providing recommendations to the MOH at the cabinet level, which has the final say in issuing authorizations to operate private facilities.

DIPE was established in 2006. Its mission is to collect, analyze, and disseminate health information in Ivory Coast; maintain and update a national health map and directory of all health facilities operating within the country; establish and maintain a database of all health and treatment statistics; conceive, plan, and execute specific studies to inform public health policy; and design, implement, and promote a national system of epidemiological evaluation in liaison with services focused on specific conditions such as TB, malaria, and HIV and AIDS.

DPM oversees the process of registering any medicine or pharmaceutical product for manufacture, sale, and/or distribution in Ivory Coast in the public or private sectors, including dietetic, cosmetic, and hygienic products. DPM is also responsible for managing an inspection services for pharmacies to ensure adherence to norms and to ensure that pharmacists and pharmacy staff respect scopes of practice. In this latter role, the DPM is also responsible for liaison with the pharmacists' associations. Lastly, the DPM is charged with organizing pharmacovigilence by conducting post-marketing surveillance and preventing the circulation of illicit drugs or misuse of narcotics and other drugs.

Established in 1960, **ONMCI** is one of the oldest regulatory bodies. ONMCI regulates the profession of doctors as individuals, not the facilities they may create or operate, and it ensures that doctors are held to high ethical and moral standards and are professionally competent. It investigates malpractice and responds to complaints about medical doctors who are accused of incompetence or unethical behavior. At the same time, this organization of medical doctors also acts as an advocacy group on behalf of its members in promoting government policies favorable to their profession. In the past, ONMCI was invited to give its formal opinion on all requests for authorization to open private facilities that were submitted to the MOH. For the past several years, however, the MOH has not requested ONMCI's opinion for new authorization requests.

4.2.1 CHALLENGES FOR THE GOVERNMENT

The government of Ivory Coast faces multiple challenges in providing leadership for the AIDS response going forward and in engaging the private health sector in that response. The integration of the former AIDS ministry was done with the laudable intention of normalizing the AIDS control effort into established structures and systems. As noted, significant efforts still need to be made in defining roles and responsibilities to ensure smooth implementation of programs. In addition, while building the AIDS control efforts into more sustainable, established systems, the government runs the risk of losing focus on the epidemic and making it more difficult to respond flexibly and appropriately to address ever-changing epidemic trends. This means the government will have to provide strong leadership and ensure efficient coordination of bilateral and multilateral AIDS control programs while increasing the share of local contributions to the effort.

Moreover, it will not be sufficient for the government to maintain its current level of effort. If Ivory Coast is to reduce the significant unmet need for treatment and ensure that the decline in seroprevalence continues, new strategies will have to be developed to enroll eligible patients into treatment and to improve behavior change strategies. Increasing the local contribution to the AIDS effort will require greater allocation of government resources, but ideally will also involve leveraging more resources (financial AND technical) from the private sector—both for-profit and nonprofit. Engaging these sectors presents special challenges. The private for-profit sector has grown significantly over the last 10 years, and although this expansion means it can reach more people, the private sector's weakness in quality assurance systems will require the government use caution in engaging the private sector to ensure that private providers are capable of meeting quality standards. Quality assurance issues also exist among NGO and nonprofit service providers—providers who currently face the additional challenge of becoming less dependent on external funding while maintaining their social missions. A frequent complaint from health authorities at the regional and district levels is that many NGOs are responsive to donors, but do not report to or coordinate with local government authorities.

Improving and ensuring quality of care in the private sector (for-profit, nonprofit, and faith-based) requires the government regulatory bodies to play a much more active role in inspecting, supervising, and, when appropriate, closing down substandard facilities. Unfortunately, the staff, logistical resources, and budget of the DEPS are woefully inadequate to perform this role. DEPS inspections have been spotty at best and they often require effective coordination and follow-up with health districts' staff.

In addition, DEPS and the regulatory bodies face the challenge of maintaining consistent and transparent processes that well-intentioned private providers can follow to responsibly exercise their professions. The non-issuance of authorizations by the MOH to private providers

undermines the credibility of the authorization process, especially when no reason is given for the delay in issuing authorizations and there are no plans to catch up on authorizations. DEPS must also avoid instituting regulations or procedures that appear to be arbitrary or seem designed more to raise its revenue than to ensure quality. For example, DEPS recently began requiring that providers obtain a study of the proposed floor plan of each new facility from a specialist (geometer) chosen by DEPS, not the provider, at a reported minimum cost of CFA 250,000. DEPS would do well to meet with the professional associations to agree on reasonable quality standards that are appropriate for different facility types to ensure that the associations support the new quality improvement efforts. This is preferable to establishing adversarial relations with the providers, who then end up seeing the government's efforts to improve quality as punitive actions against the private sector.

4.3 ROLE OF THE PRIVATE NONPROFIT SECTOR

Private nonprofit health facilities have been established for years in Ivory Coast, long before the emergence of AIDS. The majority of these facilities are faith-based and Christian hospitals and clinics. More recently, some secular NGOs have established small clinics or consultation offices to respond to an expanding need for health care that was not being adequately served by the public sector.

In the case of NGOs, many organizations that were created to fight AIDS through prevention and psychosocial support have more recently evolved into service delivery organizations and are now providing testing, treatment, and support for PLWHA. A good example is Renaissance Santé Bouake (RSB), which, until 2004, was exclusively focused on prevention and counseling for high-risk groups in Bouake. It is now primarily focused on managing sites for counseling, testing, and treatment of PLWHA. This has been a natural evolution of RSB's mission to serve all the needs of a target population; however, it does raise questions about the organization's core competency.

NGO treatment facilities are generally considered paramedical establishments and follow decree number 96-877 of October 25, 1996, which determines the classification, definition, and organization of private health facilities. In reality, there is a wide range of situations that do not correspond to the typology defined in the current laws or decrees.

In addition to private medical centers or clinics promoted by national NGOs and supported by donors or international organizations, the nonprofit sector has health facilities that are considered to be nursing or maternity facilities, and these are normally limited to primary care facilities. Many of these centers have expanded the range of services they offer (including services they are not authorized to provide), and have hired medical doctors. In the case of "social-medical centers," it is not uncommon to find their services expanded to include the use of equipment that makes their services comparable to those offered at medical centers or private clinics.

A noncompliant condition the assessment team found is that some NGO facilities provide a full range of care, from nursing to medical and specialty care, without authorization or registration to operate as health facilities. These facilities were simply authorized to operate as offices of private associations. One such case is *Côte d'Ivoire Prospérité*-CAMES in Yopougon. The only official document recognizing the NGO's ability to operate is a convention signed between the ministry and the NGO supporting the social mission of the organization.

Some of the nonprofit facilities offer a full range of HIV and AIDS services, from counseling and testing to PMTCT and ART. Many of these service providers have received significant support and training through partnerships with Alliance, ACONDA, Elizabeth Glaser Pediatric Aids Foundation , Ariel Glaser Pediatric AIDS Foundation, FHI, and others, using PEPFAR or Global Fund financing. All facilities visited respect policies of free HIV testing and ART treatment; however, the more established ones, which offer a wider range of services, recover a high percentage of their operating costs through user fees. The Clinic Wale in Yamassoukro, for example, charges for services according to the public sector scale, but is able to recover nearly 100 percent of its operating costs through patient fees. At the other extreme are NGOs like RSB that only rely on member contributions to recover their costs. These contributions are irregular and insufficient. RSB is currently developing new strategies for income generation, which may reduce dependence on donor funding, but also risk taking the organization farther from its social mission.

It should be noted that although many of the nonprofit facilities are operating outside the legislation in force, it does not necessarily mean that the services they are providing are substandard. Those facilities receiving funds from PEPFAR partners that are approved by PNPEC to provide treatment receive quality assurance monitoring from those partners, and they may be offering high-quality services. The oversight of PEPFAR partners or PNPEC, however, is limited to selected HIV and AIDS services and is not a systematic or even an official system of quality assurance. If these facilities are to be part of a more sustainable response to the AIDS control effort, then they will need to be brought under the purview of the regulatory bodies that are charged with providing systematic oversight.

Many of the AIDS control NGOs are members of COSCI and RIP+, which are umbrella organizations created to improve professional standards among NGOs as well as to advocate on behalf of civil society and their members. Both organizations have received donor funding to conduct training with member NGOs in capacity building, data reporting, and management which should help strengthen the systems underlying service provision. However, the mandate of COSCI and RIP+ to improve quality and management of NGOs is somewhat limited. The organizations have no authority over their members and cannot impose any sanctions on members who do not adhere to prescribed practices. Moreover, because these organizations are also expected to advocate on behalf of their member organizations, COSCI and RIP+ may be hesitant to impose any sanctions on their members or make public any negative findings of their members' operations. The umbrella organizations also have their own sustainability challenges since they depend on members' dues to support their operations. Both organizations admitted that members are often slow to pay their dues and that without donor support, they would not be able to function.

4.3.1 CHALLENGES FOR THE PRIVATE NONPROFIT SECTOR

The private nonprofit sector has shown itself to be a credible complement to the public health sector in the HIV and AIDS response. In spite of the irregularities noted above, many of these health facilities are well organized and well run and serve the needs of specific populations. Many of them are also able to offer health services at a cost to consumers on par with the public sector fee schedule and with minimal support from donors. Not all nonprofit facilities operate efficiently, however, and there appears to be no effective mechanism for separating the strong facilities from the weak ones. The government regulatory bodies (DEPS, DPM) do not provide adequate oversight of service provision in nonprofit facilities and the NGO umbrella organizations have no enforceable standards for their members. In terms of organizational viability, most nonprofits are highly dependent on external funding for their existence, which

itself runs counter to the laws governing associations. As defined in Ivoirian law, the purpose of the association is to create a legal entity that can be used to mobilize the technical and financial contributions of its members for a social purpose, but too often associations are created with little or no contribution from their members and are simply a vehicle for receiving external funding and employing members in donor-funded projects.

The challenge for this sector will be to preserve the service orientation of NGOs in serving the needs of specific groups while raising standards in organizational legitimacy and in the quality of service provision. The government or international donors may have to set new standards for associations to mobilize their own resources to improve their standards in organizational legitimacy. Regulatory bodies may extend their purview to the operations of nonprofits in order to ensure quality assurance in nonprofit facilities. RIP+ and COSCI may be able to play a role in ensuring NGO best practices, but to do so they will have to give up soliciting contributions from members and serving as a lobbying organization. This role is incompatible with the role of regulator.

4.4 ROLE OF THE PRIVATE FOR-PROFIT SECTOR

As of 2010, the private-for profit-sector included but was not limited to 13 polyclinics, 136 clinics, and 114 medical centers or consultation offices and 964 nursing centers (see Table 5). The private for-profit sector grew impressively over the past 10 to 15 years. From 2008 to 2010 alone, the number of private facilities (authorized or unauthorized) grew from 1,494 to 2,036, and some of this growth can be attributed to the need to fill gaps left by public facilities during the years of instability. Most of the for-profit facilities that cropped up during this time have been at the low end of the sector—nursing centers, “Chinese clinics”, and a miscellaneous category of health centers.

Although no statistics or studies on the profile of patients using the private sector are available, informants working in the larger private facilities (polyclinics) indicated that the vast majority of their patients were from the middle or upper class, and approximately 80 percent of their patients have some kind of health coverage—either a formal health insurance policy or a company that pays for health services and uses a private insurer as a third party payor. The profile of patients using private nursing clinics and medical centers seems to be much different. Many informants from such facilities in smaller towns or lower income sections of Abobo, Yopougon, and Koumassi reported only 10–20 percent of their patients paying for their services through health coverage, and these facilities charged lower fees since many of their patients paid out of pocket.

Several informants, including the professional associations, claimed the private sector’s contribution to the supply of health services was approximately 40 percent. This estimation seems to be based on a 2008 study that showed the number of beds available for hospitalization in the private sector (about 1,200) in comparison to the total number of beds available (about 3,000 beds). If different indicators were used (such as annual number of consultations), the contribution of the private sector to overall health in Ivory Coast would be much different and probably lower. In the areas of HIV and AIDS, the contribution of private for-profit facilities seems to be limited to some provision of counseling, testing, and referrals, and minimal provision of ART given the government’s strong control over the provision of ART and PMCT. Prior to PEPFAR and to the creation of PNPEC, many PLWHA were treated in the private commercial sector. There was, however, no standardization of protocols and a range of treatment regimes were used, which increased the risk of drug resistance. Currently, only a select number of private commercial facilities have been authorized to provide ART through partnerships with Alliance or ACONDA, but these are exceptions. The most recent estimate of

private facilities offering counseling and testing is reported to be 126, but this is likely underestimated since many private facilities can and do procure rapid HIV tests and offer HCT services to their patients without systematically reporting their testing data to the relevant public sector authorities or PNPEC. In addition, private facility referral of clinically identified HIV and AIDS patients (typically late stage presentation) to public sources of care are rarely captured or reported as part of national data and disease surveillance.

In general, data about the private health sector are difficult to obtain, and even where available, are difficult to interpret. For example, counting the number of private health facilities that are operating legally or clandestinely is difficult. A 2008 study commissioned by the Syndicate of Private Doctors of Ivory Coast (SYNAMEPCI), with funding from the European Union, reported a total of 1,254 facilities in the southern zone, of which 847 were not authorized. According to DEPS, of the 2,036 health facilities surveyed in 2010, 1,482 (72.79 percent) were not authorized.

However, from this assessment team's discussions with providers and DEPS, it became clear that there are different levels of "illicit "operations. Many of the recently opened facilities have initiated the process of getting registered and authorized by the MOH. Of these, most have gone through the inspection process managed by DEPS and received a "certificate of conformity," which indicates that the facility has the appropriate infrastructure, equipment, and staff to perform the services it is allowed to perform within the specific scope. Normally a formal authorization by the ministry would soon follow the receipt of the certificate of conformity, but for reasons that are not clear to the assessment team, the ministry has not issued any authorizations to private facilities since 2007.

Many of the providers working in "illicit" facilities have also received their approval to practice medicine from ONMCI. Strictly speaking, ONMCI authorizes individuals, not facilities. As already mentioned, in the past, the MOH worked closely with ONMCI in deciding which facilities to authorize, basing its decision partly on the record and reputation of the provider in charge of the facility.

Therefore, any facility that has opened since 2007 is technically not authorized and is operating illicitly, even though many facilities have shown good faith to request authorization and have received their certificate of conformity. In addition, there are new facilities that have not requested authorization or have requested authorization but have been denied their certificate of conformity that continue to operate. Of the 1,482 facilities cited above, it is impossible to know how many have received their certificates and how many have made no attempt to follow the required authorization procedures. DEPS reported conducting a survey of health facilities in Yopougon in 2001 and found that 50 percent of the facilities visited did not have any administrative document to show that they had even initiated the approval process or received a certificate of conformity, much less that they had been formally authorized by the ministry.

In the absence of adequate regulation and supervision of the private sector, the opening of new facilities continues with no assurance of good quality of care for consumers. The mere fact that a facility operates openly and is tolerated by the authorities does not mean that the facility is adhering to medical norms, that the staff is qualified to perform the services it offers, or that its medical equipment or laboratories will provide reliable diagnostics. In fact, many new clinics or health centers such as the "Chinese clinics" offer therapies and services not recognized by any western system or evidence-based medicine. Although there is clearly an increased demand for services in the private sector, the current situation is one in which the buyer must beware.

This uncontrolled growth is also one of the main concerns of the private health provider organizations that advocate for more favorable policies and better enforcement of laws governing the health sector. The more responsible private operators feel pressure from both sides. They are seeing potential clients trade down to cheaper facilities (even if the quality is much lower), while at the same time experiencing greater fiscal pressure and more difficulties in making needed investments in medical equipment and supplies. Currently, the private commercial sector receives no fiscal benefit or direct support from the government. In spite of guidelines from the West African monetary union encouraging policies of duty free importation of medical equipment, in Ivory Coast, all medical equipment and supplies imported by private pharmacies and for-profit providers are subject to customs and import taxes. These providers are obliged to pass on some of these additional costs to their clients or to make do with outdated equipment.

The recommended prices for the private sector currently appear lower than they should be when inflation is taken into account. A key informant from the private sector stated during an assessment interview that the actual cost of a specialist consultation in the private sector was 17,500 CFA, but until 2010, specialists could only charge CFA 14,000. Private facilities are also under pressure to agree to lower costs from private companies and insurers who want their employees or subscribers to be able to use high-quality facilities at the lowest possible cost. Most clinics accept lower negotiated prices to ensure steady client flow, but this reduces profit margins that would allow for greater investment. Private providers also complain that because the government does not regulate the insurance industry, they have no place to complain if they suspect insurers are arbitrarily reducing their payments. Indeed, the only “regulation” of the private insurance industry is self-regulation through the association of insurers. There is no structure within the ministries of finance or health that regulates health insurance.

The two private professional associations—the Association of Private Clinics of Ivory Coast (ACPCI) and SYNAMEPCI—are very active and have tried to lobby the government on these issues with little success. These associations tried to use the 2008 study financed by the European Union to catalyze a policy dialogue with the government, but despite initial assurances, their efforts did not produce any result. Lack of interest and frequent turnover among MOH staff have left the private sector with the impression that they are on their own and have no place to take their grievances. At one point, the idea of creating a permanent commission for policy dialogue with the private health sector emerged, but nothing it never materialized.

Recently, the government has developed a national strategy for universal health coverage that will increase access to quality health care and create the conditions to accelerate the development of the private health sector. To date, none of the intentions expressed in the strategy have been implemented.

4.4.I CHALLENGES FOR THE PRIVATE FOR-PROFIT SECTOR

The challenges facing the private sector are numerous and extensive. The most important, both for the credibility of the sector and for public health, is to ensure quality in the private sector. This is primarily the responsibility of the government, but the private sector can support this agenda by educating the public, lobbying the government, and encouraging more private providers to adhere to professional associations and respect professional norms.

The second challenge for the private health sector is to improve its business operating environment so that providers receive appropriate fiscal advantages, are able to price services

based on objective assessment of current costs, and have recourse to a public oversight body in disputes with health insurers. This challenge will also require more effective lobbying of the government to reform policies.

The third challenge is for the private sector to negotiate an appropriate place in a national health strategy that complements the efforts of the public sector and improves the ability of the country to respond to major health challenges like the AIDS epidemic. The capacity of many of the well-equipped, well-staffed, and well-managed clinics and polyclinics is a significantly underused resource for public health. Meeting this challenge requires engagement of the public sector with the private sector and a new broader vision of the private sector's role in the health system.

4.5 ROLE OF THE HEALTH FINANCE SECTOR

Although only approximately 10[18] percent of the population benefits from health insurance or some sort of risk pooling scheme, the health finance sector is extremely important for the private health sector (*Caisse Nationale de Prévoyance Sociale* 2012). The insurance sector in Ivory Coast includes 38 companies, of which 18 offer some form of health insurance coverage. The health insurance products are marketed by the insurance companies themselves as well as by brokers or other intermediaries. The annual turnover of the insurance companies was about CFA 31 billion in 2011 and the largest companies contributing to this turnover are MCI-Collina, Gras Savoye, and ASCOMA. Because no governmental regulatory body exists for health insurance, any effort to set industry standards comes through the Association of Insurance of Ivory Coast, which includes all insurers covered under the Inter-African Conference of Insurers code, which is a regional association of insurers promoting good practices among insurers.

In addition to formal, for-profit insurance companies, there are three main types of health financing cooperatives, or "*mutuelles*": company- based *mutuelles*, provider-based *mutuelles,* and community-based *mutuelles*. The National Health Development Plan for 2012–2015 reports approximately 40 *mutuelle* organizations operating in the country. Currently, *mutuelles* are governed according to the laws of associations. Because they are treated like associations rather than financial institutions, *mutuelles* are not subject to government oversight of their operations and members often take the risk that a badly run *mutuelle* may become insolvent if obligations to providers exceed the resources of the *mutuelle*. Having a large number of members is no guarantee of avoiding this problem. The *mutuelle* of government employees (MUGEF-CI), which is the largest *mutuelle* in the country with approximately 258,000 subscribers and 650,000 beneficiaries, hit a financial crisis in 2011–2012 due to poor management and administrative costs that reached 48 percent of payout.[19]

Company-based *Mutuelles*

Many companies use this type of *mutuelle* to provide coverage against health risks for their employees. Within the public sector, in addition to MUGEF-CI, employees of the treasury, the national police, and the military all have their own *mutuelles*. Often such *mutuelles* hire a for-profit insurance company to do claims administration and negotiate with providers. The insurance company takes no underwriting risk, but is simply paid an administrative fee based on

[18] Strategie National de Financement de la Sante Pour Tendre Vers la Couverture Universelle p. 20 ; and *Présentation de l'ACPCI au Salon d'exposition multisectorielle et du colloque des opérateurs économiques du secteur de la santé en Afrique (SIEHMA, Cotonou 2012) available at :* www.fichier-pdf.fr/2012/09/03/cote-d-ivoire/cote-d-ivoire.pdf

[19] Le Patriote, « MUGEF-CI : La mutuelle rétrocédée aux fonctionnaires en 2013 » December 11

the volume and value of claims made. In other cases, members of the *mutuelle* may choose to manage their own claims through elected members or an employees' union.

In the private sector, the system of social coverage is ensured by the National Social Safety Fund (Caisse Nationale de Prévoyance Sociale) and adheres to other requirements of Ivoiran labor law. Many other companies opt for a mixed model in which the employees are the main contributors to the fund. In this case, the employer also contributes a percentage of employees' salaries and provides financial reserves when necessary to ensure the stability of the *mutuelle*. In the case of Nestle, for example, employees contribute 2 percent of their salary in addition to Nestle's contribution. The coverage is 90 percent for consultations and 100 percent of hospitalizations with approved providers. HIV- and AIDS-related services are included in the coverage. Claims administration is contracted out to a private insurance company. The national electric company (CIE) has a system of self-insurance for its employees and pays providers directly, although it still uses a private insurer for claims administration and medical control. In addition to commercial company-based *mutuelles*, there are health insurance *mutuelles* organized by agricultural cooperatives and employee unions.

Provider-based *mutuelles*

In the model of *mutuelle* initiated by the health provider, the provider is simultaneously the seller of health services and the mechanism for pooling and managing the risk of his or her patients. The provider calculates the costs and the risks associated with a specific predetermined package of services and then requires patients to pay their premiums for the coverage on the package of services to the provider. Obviously this model has the advantages of eliminating administrative costs associated with using an insurer or third party payor. For the health provider, it may simplify the burden of making claims with insurers or trying to collect debts from patients. The provider only needs to verify that the patient has paid his or her annual or quarterly premium. When any services are provided outside the predetermined package, the patient must pay out of pocket.

This form of *mutuelle* is always initiated by the provider since the provider is taking a significant risk in pricing the package of services and guaranteeing delivery of services whenever the need for treatment arises. The experience of this model has not always been a positive one. In Kenya for example, provider-based insurance created problems when providers did a poor job of estimating their risks and they went out of business because the premium income did not cover their costs. Many patients lost out as well since they had prepaid their premium but had not received services by the time the provider went out of business.

This model might, however, be effective if the package is well conceived and appropriately priced and if the provider has sufficient financial reserves to cover losses. For example, donations received by faith-based or nonprofit health providers in support of their mission could be an effective mechanism for providing reserves. CIRBA has instituted such a *mutuelle* scheme for its patients (including patients being treated for AIDS) largely because it found that collecting quarterly premium payments was much simpler and more predictable than trying to collect user fees on services through patients' own resources or insurance coverage. Because CIRBA has its own charitable resources, it has not had financial trouble from this scheme although the director of CIRBA admitted that they did not use any formal actuarial analysis to determine the package of services and the price. This experience merits further documentation as a useful experience in financing HIV and AIDS services.

Community-based mutuelles

A community-based *mutuelle* is defined as an association that members voluntarily join without the objective of earning profits and whose mission is to promote solidarity among its members in managing financial risks from illness or injury. The *mutuelle* members collectively decide what health products and services will be covered, what the conditions of membership will be, and what the membership fees will be. This independent type of *mutuelle* is very different from company-based or provider-based *mutuelles*. Typically, the creation of risk pools is done through a system of community organizations and is not linked to a specific employer or provider. Although quite common in many countries in Africa, including Senegal, Mali, and Benin, this form of *mutuelle* is not well developed in Ivory Coast. Community-based *mutuelles* are generally less financially viable than provider- based or employer- based mutuelles for a variety of reasons. Community-based *mutuelles* are only sharing contributions of members whereas in provider- or employer-based *mutuelles*, members are more likely to pay their contributions because they see their contributions as a premium to access a desired provider or as a condition to benefit from employers' contributions.

4.5.I CHALLENGES FOR THE PRIVATE HEALTH FINANCE SECTOR

Although some good models for health financing exist in Ivory Coast, the biggest challenge is that the health financing mechanisms do not reach, and are not available to, the majority of the population. Ivoirians who are unemployed or who are not employed in the formal sector have virtually no opportunities to manage their financial risks related to illness and injury by joining a prepaid risk pooling scheme. Compared to other African countries such as Ghana and Rwanda, which are fairly advanced in designing and implementing national health insurance schemes, Ivory Coast, perhaps because of its history of having the state guarantee free health care, has been slow to develop adequate plans to address this need. The government has recently begun to take steps in this direction (December 2012), publishing a draft national strategy for health financing toward universal coverage. However, this document is still a draft and while it provides some important vision toward universal health coverage, it is very short on sources of financing and implementation mechanisms.

The second major challenge for the health finance sector is to continue to link health financing to provider quality and ensure that financing provides appropriate incentives for health providers to maintain quality standards. Although the insurance companies have some basic accreditation systems for providers and clinics that they enroll in their schemes, these accreditation systems are very superficial and do little more than use checklists to ensure that facilities have adequate infrastructure, providers have appropriate diplomas, and equipment is in working order. There is a risk that with weak regulation and supervision by the government and the downward pressure on prices coming from consumers and the insurance companies, there could be a "race to the bottom" in provider quality as more services are pushed to lower level facilities and lesser trained providers.

The third challenge, which HIV and AIDS stakeholders must put to the health finance sector, is how to increase the role of the health financing institutions in covering HIV and AIDS costs. The pooling and purchasing mechanisms exist, but because the government has opted to declare AIDS treatment a donor-funded entitlement, for the most part, insurers, *mutuelles,* and local funders have not had to contribute significantly to HIV and AIDS costs. If HIV and AIDS care is to become more sustainable, this will have to change.

5. FINDINGS AND RECOMMENDATIONS

5.1 GOVERNANCE

Findings

Strengths: In general, the MON has an adequate number of structures and tools to be able to provide leadership and appropriate regulation of the private health sector. The laws that define scopes of practice, professional standards, and types of facilities are still well defined and appropriate for the private health sector in all its professions.

Moreover, the existence of professional associations (ACPCI and SYNAMEPCI) that are well organized and motivated to work with the government to better play its role of stewardship of the private health sector is a positive attribute. They have strong incentives to eliminate providers who cannot achieve minimal health standards and to help the government communicate regulatory laws clearly and transparently.

Weaknesses: Even when laws are well conceived and clearly written, they are often poorly understood and not well communicated. Enforcement of laws and regulations is also very weak in spite of recent efforts by DEPS to address the problems. Given the growth of the private health sector over the last five years, the financial, human, and logistical resources that DEPS controls is woefully inadequate to fulfill its regulatory mission.

Overall, many of the laws and legal requirements that regulate the provision of health care in the private sector have not evolved since the 1960s. The laws have not adapted to the changing needs of the population, the advent of information technology, and the increased need for flexibility in developing effective service delivery models. The advent of the HIV and AIDS epidemic has also forced adaptation to a less rigid approach to the health pyramid and the definition of roles and responsibilities.

Another weakness is that there is no institutional home or formally defined process for engaging with the private health sector in formulating health policies that impact them or are of general interest to health professionals. Other than the DEPS, which has an explicit role in regulating and inspecting the private sector, no division within the MOH is responsible for regularly consulting with and informing private health providers. As a result, private providers and their representative bodies are left out of all important planning, policy making, and strategic design meetings and consultations.

Recommendations:

1. As a first step, it is important to create a permanent forum for exchange with the private health sector. In addition to establishing a permanent task force or technical committee, it is

critical to assign the responsibility of supporting and driving an agenda for the commission to an appropriate structure within the public health sector and provide an appropriate level of budget support to permit efficient funding.

2. The next step and the first order of business for the permanent commission should be to conduct a systematic review of the legal and regulatory arsenal governing the private health sector with a view to identifying the laws and decrees that need to be updated or revised. This exercise should identify gaps in the regulatory framework and develop new texts to fill those gaps.

3. A critical part of the review of the regulatory process would be to identify the process by which DEPS responds to requests for authorization of new facilities to ensure a more transparent, practical, but rigorous approach to allowing providers to establish and maintain high-quality facilities. Once these processes have been defined, with private sector input, a more appropriate level of budget support should be allocated to permit the DEPS to perform its function effectively and fairly.

4. A true national development plan should be created for the health sector that addresses the needs of the public and private sector through a comprehensive analysis of the entire health system. This would go beyond the scope of the current national health plan which is silent on the role of the private health sector and its role in providing care for the population and in promoting growth in the country. This national plan should then serve as a basis for encouraging private commercial investment in the health sector along with support from bilateral and multilateral partners.

5.2 HEALTH FINANCING

Findings

Strengths: The first requirement for a strong health financing system is a growing economy that spreads income across its population. After years of economic stagnation due to internal conflict, the government of Ivory Coast has taken positive steps to encourage investment, and prospects for economic growth are improving.[20] With a Gini index of 41.5 (World Bank 2008), Ivory Coast has relatively solid income equality, and as the economy grows, income is likely to be spread more equitably. The industries expected to drive growth (manufacturing, tourism, trade, and agriculture) tend to distribute wealth more equitably than extractive industries.

As the high share of out-of-pocket expenses demonstrates, the Ivoirian population also has an ability and willingness to pay for its health services. This is a strong, positive indicator for health financing in the country even if paying out of pocket at the time of treatment is not the best way to contribute to health financing.

Ivory Coast also benefits from a well-developed insurance industry that has developed strong systems for providing health insurance, including acting as third-party payors for employers and *mutuelles* who self-insure.

Weaknesses: With only 10 percent of the population benefitting from any health coverage, the low level of risk pooling for health expenses is a major weakness in the system. The lack of prepaid insurance schemes explains the high rate of out-of-pocket expenses. Paying out of

[20] http://www.bloomberg.com/news/2013-01-07/ivory-coast-has-put-economy-back-on-track-imf-s-lagarde-says.html

pocket reduces health-seeking behavior, creates financial shocks that push families into poverty, and makes for unreliable and unpredictable revenues for health facilities. Even for those people who do benefit from health insurance coverage, few plans provide adequate coverage for their cost of medicines, which is where the largest share of out-of-pocket expenses goes.

Although Ivory Coast has the foundation of a modern insurance industry, the lack of an insurance regulator for health insurance is a significant weakness. Although the insurance association acts as a self-policing mechanism to encourage best insurance practices, it is not a substitute for an independent insurance regulator, which can investigate complaints by providers and consumers and participate in reviewing reimbursement rates through objective analysis of costs. The lack of an insurance regulator may be one reason why so many companies choose to self-insure.

At $66 per capita per annum, the overall level of spending on health is too low, and the government's contribution is too low for a country that once was in a middle income category. This is especially true of the HIV and AIDS sector, which is heavily dependent on external funding. The fact that the government has taken steps to design a universal health coverage scheme is a very positive development indicating the government recognizes the problem; however, the strategy is a long way off from being implemented and current discussions do not offer details as to where the government will find new funding to finance universal health coverage. Given the relatively high share of out-of-pocket spending on health, it is clear that government should be the main source of increased spending on health.

Recommendations:

1. The government should make **expanded or universal health coverage** a priority. Ivoirian consumers need to be given viable options to purchase health coverage rather than pay out of pocket, whether they are working or not. The government should strongly evaluate the quality of the insurance coverage in addition to the quantity. If the only way to offer coverage to all Ivoirians is to offer a coverage package that includes very basic care, then the government would be better off planning to gradually expand to more comprehensive coverage as the latter is more likely to reduce out of-pocket payments.

2. The government can also take steps to expand health insurance coverage in the workforce by establishing an insurance regulator and offering fiscal advantages to smaller employers who provide health coverage for their employees. For Ivoirians outside of the workforce, the government and international partners can develop a program to encourage the creation of more community-based or informal sector-based *mutuelles*. The government and international partners can provide seed capital and technical assistance to encourage communities to recruit members and create viable risk pools. These community-based *mutuelles* should be linked to commercial insurers for claims administration to leverage existing expertise in the commercial sector and to keep administrative costs low.

3. Expanded health coverage should also be designed with two key criteria. First, consumers should be able to choose providers in the public or the private sectors. Allowing consumers to purchase care in the private sector will help the private sector to grow, but more importantly, it will create strong financial incentives for private providers to meet quality standards. Participating in the expanded coverage program would have to be contingent on providers being accredited and maintaining their accreditation through adherence to quality standards. The second important criterion for expanded coverage is that it provide increased

coverage for the purchase of medicines. While covering all drug costs will almost certainly be unaffordable, providing partial coverage for medicines is critical to reducing the high out-of-pocket levels.

4. Financing of HIV and AIDS control efforts needs to be made less dependent on external resources. Over the long term, rollout of a universal health coverage scheme that includes treatment for HIV and AIDS services will be the most systematic way of addressing this problem. In addition, the assessment team recommends the following two steps be made in the short term:

    - Increase the government contribution to HIV and AIDS funding. Funding mechanisms and structures exist to absorb new HIV funding, but the Ministry of Finance needs to make the contributions. Expanding the existing treatment fund for lower income groups or paying off back debts to the PSP are good initial steps. Institute co-funding requirements on NGOs benefitting from HIV funding. The requirements would mandate NGOs recipient of donor funding to put in place mechanisms that raise a certain percentage of their operating costs from local sources. These could include mechanisms such as members' contributions, income-generating activities, fundraising campaigns, and cost recovery from services. The fragmentation of NGOs involved in the HIV and AIDS effort with too many small NGOs that bring no financial resources to the effort is inefficient and unsustainable and needs to be addressed. If the government and donors required local NGOs to contribute 10–20 percent of financing to their HIV and AIDS activities as a firm condition for funding, then it would help the best NGOs to expand and reduce dependency on external funding.
    - Leverage the resources of private for-profit health providers by expanding the number of those providing HIV and AIDS services: Treatment centers in the public or nonprofit sector require 100 percent of their operational costs to be covered by the national treasury or donor funding. Many private sector facilities stand ready to provide HCT, ART, and PMTCT and require only additional training, supervision, and access to subsidized inputs. Their existing operations cover the cost of their infrastructure and staff. Using more private providers will help to leverage more local resources and lower the cost per patient treated.

5.3 HUMAN RESOURCES

Findings

Strengths: Unlike some countries, Ivory Coast has a large and growing private health sector with a significant number of qualified health personnel, currently estimated at 17 percent of all medical personnel. Moreover, nearly all of the private providers interviewed for this assessment indicated an interest in being allowed to provide more HIV and AIDS services. They have the foundational training, but require additional training in HIV and AIDS and need to be authorized to do so.

The private nonprofit sector has a significant number of trained staff with extensive experience in the provision of HIV and AIDS services, including counseling and testing, PMTCT, ART, and care and support for PLWHA.

The existence of a multisectorial committee for the elaboration of a national policy on human resources is an important opportunity. This committee was created through a ministerial decree in 2007 and it includes representatives of private provider associations. It, therefore, offers a viable forum to develop appropriate human resource policies that allow the public and private sectors to work in a more complementary fashion.

Weaknesses: The dual practice of providers working in both the public and private sectors is currently poorly regulated and open to abuse. According to current official regulations,[21] public sector employees can only work in private sector facilities when they have retired from the public sector or when they have formally requested and received a leave of absence. In addition, according to a presidential decree, public sector doctors are permitted to work in private facilities two afternoons per week. As was noted in an evaluation by the European Union,[22] however, many public sector employees work unofficially in the private sector without obtaining approval of their supervisor or taking a formal leave of absence. In addition, they often work in facilities in a category that does not permit the type of services they are offering, such as doctors performing surgeries in nursing centers. Within the public sector, there is a general understanding that health professionals are trying to supplement incomes that are considered to be too low for an acceptable standard of living. This understanding leads to a tolerance for absenteeism, which undermines the quality of care in the public sector.

Another weakness in human resources is the lack of oversight that the authorities, especially the DRH, has over personnel working in the for-profit, nonprofit, faith-based, or even semi - public entities (e.g., LNSP, PSP). This means the MOH has a poor understanding of the actual number of qualified personnel who are available to provide care, and this negatively affects planning and investment decisions by the ministry.

The lack of training in management offered to health personnel being assigned important management tasks is another significant weakness. As experienced medical professionals advance in their careers, they progressively practice less medicine and more management of staff, budgets, inventories, and processes. However, the curricula offered by the medical training institutions does not prepare them for these responsibilities, either at the pre-service or in-service stage of their careers. This adversely affects both the public and private sectors.

A systemic weakness for the private health sector is the lack of involvement of private providers in in-service training activities organized by the public sector, including many supported by international donors and NGOs. Although the private sector benefits indirectly from public sector training because so many public sector employees work in the private sector, many private providers would benefit from being allowed to participate in public sector trainings at their own expense. The private sector associations also organize professional training, but because these rely on members to bear the full cost, the range of training offered is limited. In general, coordination and planning of training of health personnel across public and private sectors is weak. In some facilities, providers may go years between in-service training events, while other areas experience personnel absenteeism due to the frequency of off-site training workshops.

[21] *Elément constitutif de l'annexe au décret n° 96-878 fixant les conditions d'autorisation et d'immatriculation pour l'installation des professions de santé dans le secteur privé*

[22] *Forum national pour l'amélioration de l'environnement des affaires dans le secteur privé de la santé en Côte d'Ivoire, juin 2008*

In the area of HIV and AIDS, private providers are not offered the chance to benefit from training or supervision in HCT, PMTCT, or ART. As a result, when patients test positive, they are referred to public sector or NGO facilities.

Recommendations:

1. The MOH should develop an updated dual practice policy that safeguards its advantages while preventing its abuses. The assessment team believes it is neither feasible nor desirable to forbid public sector personnel from working in the private sector; however, new procedures are required to ensure that public providers fulfill their obligations for service in the public sector, obtain the necessary approvals when working full or part time in the private sector, and do not engage in self-referral or purposeful reduction of quality in order to drive up volume of private sector practice. In general, manifestations of dual practice in Ivory Coast need to be mitigated to maximize benefits to providers, patients, and the health system, while limiting negative outcomes to the detriment of the patient or the public facility. A new policy should be elaborated by the multisectoral committee for human resources. The hospital reform underway could be a good starting point, particularly in respect to the statutes of hospital and personnel and the reform of health care.

2. The MOH should promote greater use of contracting out services or potentially ART down-referral to the private sector. Contracting out permits the public sector to mobilize human resources in the private sector for a specific need in a defined period of time, which allows the public sector to respond more quickly and effectively to staffing needs than if facilities have to hire permanent staff. It also benefits the development of the private health sector by allowing facilities with excess human resource capacity to "sell" that capacity temporarily and at the same time develop a cadre of staff who gain additional experience working in the public sector. One model for contracting out that could work as a public-private partnership is the contract of "medicines for services." In this model, the public sector has the responsibility of providing the private sector with free medicines and supplies needed to administer the medicines and, in return, the private provider provides the services as needed and reports the service statistics to the government. Other conditions and controls can be placed on the private providers to improve accountability. Many countries use this model for vaccination programs, which allows the program to expand its coverage at a lower cost and the private sector to offer an additional service to its clients. For HIV and AIDS, this model could be easily adapted for the provision of low-cost HCT if the public sector were to provide rapid test kits and training to private providers in exchange for fee structures that enable widespread private sector delivery of the service.

3. Public sector personnel should be assigned to private facilities. Although globally, human resources in the public sector are insufficient to satisfy all its needs, there are still many cases of overstaffing in specific hospitals. In Abidjan in particular, key informants reported a lack of public facilities to meet an excess supply of physicians—a major contributing force in dual practice behavior. For directors of large teaching hospitals, too many providers are a drain on the budget of the hospital and fail to develop the provider. In such cases, the public facility could assign the staff person to a qualified private facility (for-profit or nonprofit) subject to that facility ensuring the employee's salary and providing appropriate working conditions.

4. The participation of private providers could be facilitated into public sector and NGO training activities. While it is not always feasible for private providers to participate in public sector workshops due to length and timing, as a general practice, private providers should be given this opportunity. Donor-funded programs should also be encouraged to adapt provider training curricula for application in the private sector so that private providers can attend training

workshops in the evening and on weekends without losing clients. Wherever possible, training of private providers should be coordinated with professional associations, which would allow these associations to become potential trainers and adapt the curricula to the needs of their members. Taking such steps will allow public sector training to go farther, more sustainably.

5.4 SERVICE DELIVERY

Findings

Strengths: Ivory Coast has a large number of service delivery facilities that are broadly distributed throughout the country. The range in the type of facilities and providers is diverse and expansive among the public and private sectors, permitting appropriate levels of care at various levels in the health pyramid. For a country its size, Ivory Coast has a fairly broad range of specialist care.

In the area of HIV and AIDS, the scale up of the national treatment program by PNPEC and its partners has made HIV and AIDS services widely, if unevenly, accessible throughout the country. The system used by PNPEC to establish and supervise treatment centers is generally good, and the progress in getting more PLWHA on treatment has been solid. PNPEC has also established a consistent process for accrediting treatment centers, and both the service providers and the laboratories receive regular visits. PNPEC also offers training to providers at accredited treatment locations to ensure that facilities maintain their quality level or correct problem areas.

Weaknesses: Supervision of service delivery in the private for-profit and the nonprofit sectors is weak to nonexistent. Once a facility has been established, either through a formal authorization or through the issuance of the certificate of conformity, no formal mechanisms exist to supervise and verify the quality of care in private facilities. In some health districts, the district authorities will take the initiative to visit NGO and for-profit health facilities, but no standardized quality monitoring systems have been established to lead to corrective steps. The DEPS also has a responsibility for monitoring private facilities and has developed new checklists for inspections and for awarding the certificate of conformity. Because of its limited resources, however, DEPS rarely conducts onsite inspections. On the rare occasions that DEPS does conduct site visits, there are no mechanisms to follow up and ensure corrective measures are taken. The professional associations complain that the monitoring of facilities by DEPS tends to be focused on larger clinics and is executed in a punitive nature rather than being a supportive intervention. Lower level nursing homes, medical centers, or Chinese clinics that may be exceeding their scopes of practice tend to be ignored completely.

Although PNPEC's system for accrediting treatment centers is generally strong, it is limited to public sector and NGO facilities. Only four private for-profit facilities have been accredited to provide ART, for example. PNPEC could easily expand its accreditation to more private facilities if the government were to support this policy. Although the overall supply of treatment centers would seem to be adequate for the number of people receiving ART, the disadvantage of not using for-profit clinics is that PNPEC—the public sector—must pay the full cost of operating the treatment centers. For-profit clinics would conceivably be able to cover their fixed costs and would therefore require less funding per patient treated. Notably, the national treatment program may be missing patients who need treatment, because the patient may not want to be treated in a public sector or NGO facility due to confidentiality and stigma concerns and concerns over poor quality of public services.

The other weakness in service delivery is the uneven distribution of service delivery facilities and the personnel to staff them. As one would expect, private for-profit facilities tend to be concentrated in urban areas where patients have greater ability to pay for services. However, even nonprofit and faith-based facilities are scarce in some regions, as shown in Table 6 which indicates that Worodougou has no private facilities, Montagnes has one, and Moyen Cavally has two. This is also true for HIV services, even though PNPEC presumably sought out facilities to ensure even coverage. As shown in Table 10, there is only one ARV site in Worodougou, none in Zanzan, and one in Montagnes.

Recommendations:

1. The MOH needs to provide adequate financial support to the DEPS to ensure it has adequate staff and logistical capacity to conduct annual quality monitoring visits to all private facilities (nonprofit, faith-based, or for-profit) providing inpatient or outpatient care. DEPS should also work with the professional associations and quality assurance experts to develop standardized tools and processes for quality monitoring. The professional organizations can help to educate their members about the application of these processes and raise awareness for the need to achieve higher quality standards.

2. To address the worst practices in the private sector, where unqualified providers regularly exceed their scopes of practice and represent a threat to public health, DEPS may consider working in partnership with the appropriate judicial authorities to close down facilities in clear violation of the law and, if necessary, prosecuting unqualified providers guilty of causing harm to patients. Such efforts should be done selectively for the most extreme cases, but should also be done visibly to deter other unqualified providers from setting up unauthorized and unsafe facilities.

3. PNPEC should gradually expand the number of treatment centers in private for-profit facilities. Facilities should be recruited and accredited by PNPEC based on the criteria of reaching patients not served by existing treatment centers and having existing levels of investment in infrastructure and qualified staff that can offer treatment at a lower cost.

5.5 MEDICINES AND TECHNOLOGIES

Findings

Strengths: Ivory Coast has a strong private pharmaceutical sector with a growing manufacturing industry, a high performing supply chain, and quality controls that limit the entry and circulation of poor quality or counterfeit medicines. Geographical access to medicines and supplies is generally good, with over 800 private pharmacies in existence, as well as lower tier "*dépôt*" pharmacies, and drugs are made available in the public sector through virtually all of the nearly 2,000 public sector facilities.

Weaknesses: Unlike the private sector, the public sector has a weak supply chain system for procurement and distribution of medicines. At the time of this evaluation, PSP was experiencing extreme fiscal and institutional challenges and the outcome of the reform process was as yet unclear. The impact of the crisis is that PSP has had difficulties procuring from international suppliers due to numerous outstanding debts and lack of funds caused by nonpayment from the national treasury. Because PSP has experienced delays in placing orders/receiving deliveries

and a vandalized and aging vehicle fleet, the number of stock-outs has increased and the delivery cycles have been extended (one week in the major cities and one month outside the major cities). These delivery times would be acceptable if forecasting and reordering at the district level were better than the current practice. One of the sources of systemic weakness is that PSP is dependent on district health staff to place orders, track stocks, and project needs in a timely fashion to be able to better plan its orders, warehouse needs, and financing. Unfortunately, PSP has no control over the district health staff, and in spite of investments in training, until these staff have the motivation to manage, forecast, and track stocks carefully, they are unlikely to do so. The weakness of the public sector directly impacts the HIV and AIDS program since donors have opted to deliver all medicines through the PSP supply chain.

One of the strengths of the supply chain in ensuring quality is that the DPM sets and enforces high standards on who can import, wholesale, and retail medicines and pharmaceutical products. Pharmaceutical professionals with large investments in their operations will risk sourcing products from dubious suppliers or selling substandard drugs. Despite this, like many African countries that have imperfect controls on their borders, some poor quality and counterfeit drugs do enter the country and more efforts could be made to monitor the quality of drugs on the market. The DPM conducts limited post-marketing surveillance and has a limited budget for testing products for their quality at the national laboratory (LNSP).

Although the MOH has a policy of encouraging the availability of generic products in the private as well as public sector, the high cost of medicines is a financial barrier to health for many Ivoirians. Physical access to quality medicines delivered through a reliable supply chain is important, but if patients can't afford the medicines that are available, then no one's health will improve.

Recommendations:

1. The government should restructure the PSP and strengthen its logistical and technical capacity. Since this recommendation is already being studied and implemented in much greater depth elsewhere, rather than be repetitive, the assessment team simply offers the following ancillary recommendations to the PSP's reform for consideration:
    a. Rebuilding the logistical and technical capacity of the PSP will require significant investment. To make this level of investment more manageable, stakeholders should look at ways for PSP to "purchase" excess capacity at different levels in the private sector supply chain, such as warehousing at national level, transportation of stocks from national to regional warehouses at regional levels, and deliveries from regional warehouses to health districts, or from district stores to facilities. The number of new vehicles and warehouses required can be limited by contracting out some of the supply chain functions to the private sector. The private sector has logistical capacity design for frequent, low-volume, just-in-time deliveries, which at some levels would be an effective complement to PSP's capacity to deliver large volumes infrequently.
    b. Even if the PSP's capacity is rebuilt, redesign of the supply chain functions at the district and subdistrict levels would have to be examined. The assessment team recommends two approaches that could improve the linkages at the district level to ensure PSP receives better information and more timely orders. The first option is to create performance incentives for personnel involved in supply chain functions. For example, every district pharmacy that submits forecasts on time and has no stock-outs would receive a performance bonus. Another approach would be to move 20–30 medicines to a push system through the creation of a delivery team that takes stocks from the regional

PSP warehouse and regularly visits a set schedule of public facilities. At each facility visited the team “tops up” the stock of key medicines to a recommended level and records the consumption since the last visit. This approach would prevent stock-outs, provide more reliable consumption data, and would not require local staff to fill out forms, place orders, or make forecasts. It is also a model that could be contracted out to the private sector.

2. For the delivery of ARVs and HIV and AIDS commodities, PNPEC and its partners should consider, at least on a pilot basis, confiding the distribution of commodities to private wholesalers and pharmacies. Informants in the pharmaceutical sector expressed their interest in ensuring this function and still respecting the policy of free access. Even if a client comes into the pharmacy for free ARVs, pharmacists may earn their needed profit through the sale of other medicines and supplies. Some minimal payment to the wholesaler for storage and handling could be negotiated and may prove to be a lower cost than having to invest in supply chain training, set up software systems, lose stock due to expiration, or be unable to treat patients due to stock-outs.

3. A long-term recommendation is to provide technical assistance to local manufacturers of ARVs for use in Ivory Coast and the region. While still co-owned by Aventis, CIPHARM produced some quantities of Azidothymidine (AZT) for clinical trials and it has the capacity to produce some of the newer ARVs. This long-term project would require the support of WHO to achieve accreditation, but is also one that could attract private capital, create local employment, and potentially lower the cost of ARVs.

4. The government should strengthen the post-marketing surveillance capacity of the DPM by supporting its logistical capacity to select and purchase samples in circulation and then to test more samples at the LNSP.

5.6 INFORMATION SYSTEMS

Findings

Strengths: In general, all of the actors in the health system, both public and private, want to have better health information and are prepared to contribute to the effort to collect, analyze, and disseminate these data. A number of informants regretted the lack of dissemination of important studies and reports that provide important information about disease surveillance, health financing, service statistics, and other issues. The management information system (MIS) integrates nearly all of this information, although more user training is needed to better exploit and communicate this information.

The private sector is willing to participate in studies and since 2008, when the DIPE began conducting a report on the inventory of health facilities in the country, the private providers have willingly contributed their information. For its part, the public sector is also eager to more systematically integrate data from the private health sector into the national MIS. This commitment is integrated into the strategic plan for health information (2010–2014) and the DIPE is in dialogue with the private professional associations on ways to systematically obtain more accurate information from the private sector.

A number of high-performing software and database packages are in use for management of patient records in the private health sector. Private insurers, in particular, have well-developed systems for their subscribers that allow each patient with a unique identifier to receive his or her

insurance benefits at any of the more than 100 approved providers throughout the country. Nearly all of the treatment centers visited also have strong database management of their patients on ART, although most practice a dual system of paper-based records alongside the electronic database. Some of these encouraging practices merit further review to identify the best information systems and the best ways to integrate them.

The public sector has standardized MIS tools that permit better data management. SIGVISION is a software package that aggregates all health indicators at the level of each facility, at the district level, regional level, and central level. SIGDEP is software used for patient information for treatment of patients living with HIV. This application includes a component for each patient and one for the pharmacy. SIGDEP has the capacity to create and use unique identifiers for each patient in the system, although this capacity has not been exploited.

Ivory Coast also has a well-developed mobile telephone sector that offers an opportunity for mobile phone applications for data collection, dissemination of health messages, and mobile payment mechanisms that could strengthen health information systems.

Weaknesses: The integration of service statistics from the NGO sector is weak and the integration of routine data from the private for-profit sector is even weaker. Private nonprofit and faith-based organizations submit only 15 percent of the expected activity reports, and only 10 percent of the private -for-profit providers report routine services statistics to their district health authorities. There are multiple reasons for this low reporting. One reason many informants cited is that for-profit providers do not want to submit data that tax authorities could use to increase their tax burden. Other providers complained that they cannot afford the administrative burden of completing all of the forms required by the MIS and they get no benefit from submitting their data.

Although the SIGDEP application has potential, only approximately 150 sites, most of them public, currently use it. Database packages are in frequent use at treatment sites, but there is no national system for tracking patients on ART and no way to integrate data from different treatment sites into a single national database for ART. ART patients do not have unique identifiers that they can carry with them when they change their treatment site.

Although better reporting tools were developed through the collaboration between DIPE and the medical professional associations, the process of finalizing the tools and deploying them in private for-profit facilities was not completed due to a lack of funding.

Recommendations

1. The government should follow up on steps taken by the DIPE to reach out to all sources of health information to develop a national coordination strategy that will lead to greater integration of routine data from the public, private for-profit, and nonprofit providers. The DIPE should adopt flexible strategies to create tools that collect essential data while not overburdening providers.

2. The DIPE should work with the MOH more broadly to establish an agreement between the government and private providers that conditions provision of government-supplied commodities and access to government training and data to consistent reporting by private providers. If private providers see the benefits of submitting data and receiving access to analytical reports created using the data they submit, they will be more likely to submit routine data. The DIPE should continue to work with the private professional associations to

enlist them in encouraging greater reporting compliance by the private sector. One key message should be that if the private sector wants better health policies, it would benefit from helping the MOH better understand the private sector by supplying reliable data.

3. The DIPE and its partners should explore ways to integrate new technologies, including mobile devices to submit data. One potential barrier for private providers submitting data may be the burden of having to complete and physically submit paper forms. Some basic service statistics can be submitted on mobile devices and more readily integrated into the SIGDEP, the national monitoring tool. As more private providers increase access to the Internet, web-based reporting becomes a viable option. Such applications should be explored, piloted, and scaled up if shown to be feasible and cost-effective.

4. The MOH should accelerate the deployment of the SIGDEP application to more treatment sites and institute a system of unique numbers for ART patients to permit national tracking of people on treatment. This will be a first step toward integrating data from decentralized database into a single, national database. One possibility might be to supply patients with treatment cards, which include biometric identifiers, to ensure that patients carry their data with them when they move and cannot transfer their information to another patient.

5. In the interest of getting more value from data that have been collected and analyzed, the MOH should make national studies, research, and analytical reports routinely available on its website. In addition, documents of national strategies, laws and regulations governing the health sector, and norms and standards should all be made available on the website and providers from all sectors should be encouraged to make use of these reports.

6. PUBLIC-PRIVATE PARTNERSHIPS

6.1 DEFINITION OF PUBLIC-PRIVATE PARTNERSHIPS

For the purposes of this assessment, the SHOPS project defines a public-private partnership (PPP) in health as any formal collaboration between the public sector at any level (national and local governments, international donor agencies, bilateral government donors) and the nonpublic health sector (commercial, nonprofit, traditional healers, and midwives) in order to jointly regulate, finance, or implement the delivery of health services, products, equipment, research, communications or education.[23] There are other forms of public-private engagement involving exchange of information or dialogue, but to reach the level of a true partnership, the relationship between the public and private sector has to be formalized through a contract, a memorandum of understanding, or similar instrument that defines the roles and responsibilities of each sector. The scope of a PPP in health is not limited to the private sector providing financial resources to a public sector activity—it may involve sharing of risk and reward in any area of the health system functions. A partnership can be something as simple as having the public sector contract out services to the private sector, or it can be an agreement that involves multiple actors from the public sector, nonprofits, and commercial companies, each of whom has a well-defined role in a complex program.

With this view of PPPs, the assessment team sought out examples of such partnerships during stakeholder interviews and site visits. Since the government does not have a formal policy of PPPs and engagement of the private sector is quite limited, most of the experiences identified fall loosely within the broad definition above. In some cases, the activities represented potential PPPs because the current practice is informal. Other experiences had the potential of becoming larger models in which the public and private sectors can play implementation roles while becoming the basis for PPPs.

6.2 POTENTIAL FOR PPPS IN HIV/AIDS

6.2.1 PPP IN GOVERNANCE

One of the key observations of the assessment team is that weak governance of the private health sector—for-profit and nonprofit—is a significant threat preventing the private sector from playing a greater role in delivering quality services to the Ivoirian population in general and for HIV and AIDS in particular. Compared to countries with similar levels of development, the level of positive engagement of the private health sector by the government is very low. In many cases, the public sector seems to approach the private health sector as an adversary; in other cases, it is simply ignores the private sector. The first step to improving engagement and governance is to create the institutional responsibilities and the processes for the public to engage the private sector.

[23] http://www.shopsproject.org/resource-center/designing-public-private-partnerships-in-health

The private for-profit sector has professional organizations (e.g., ACPCI, APPCI, SYNAMEPCI, and ONMCI) that are capable and interested in engaging the MOH at a national level to create a forum that can serve as a permanent platform for discussing policies that affect the private sector and working together to solve common problems such as unqualified providers working in the private sector. Although such a platform need not be a costly operation, one way of beginning a simple partnership and building trust would be to have the public sector and the private sector share costs of annual meetings, which the MOH would pay from its budget and the associations would pay from their membership fees.

In the nonprofit sector, both COSCI and RIP+ have significant reach and credibility in representing nonprofit actors in the HIV and AIDS sector. However, both organizations lack true authority over their members and can do no more than expel an NGO from its membership if it engages in unacceptable practices. The government should look for ways to work more closely with these umbrella structures to provide additional oversight, independence, and authority to raise the standards of NGOs in their activities.

PPPs in governance can also be organized in a decentralized fashion at the district level. The assessment team was particularly impressed with the vision of the Department Director of Yamassoukro, who established two full-time positions to reach out to the private nonprofit and for-profit sectors to ensure that their facilities met quality standards, reported their service statistics, and organized themselves into an association to better facilitate policy dialogue and communications. The director was also very proactive in offering training and supplies to private facilities to ensure that they met quality standards. This example of private sector engagement at the departmental level was very encouraging, but it also was dependent on an individual leader. It should be formalized into a model that all departmental directors are expected to follow.

6.2.2 HEALTH FINANCING PPP

Currently, the public and private sectors have very little to do with each other in the area of health financing. However, given the high level of out-of-pocket spending in general and the overdependence on external funding for HIV and AIDS, there will be new interest in combining sources of health financing to reduce consumer out-of-pocket spending, or at least shifting more consumer spending from the time of treatment to prepayments through insurance mechanisms.

One promising model that makes the most of private commercial insurance expertise is the wide use of commercial insurers as third-party payers. This practice should be promoted for the expansion of *mutuelles* and potentially in the roll out of the national universal coverage scheme that is still being designed. Expansion of community-based *mutuelles* in other countries (Senegal and Benin) is constrained by the fact that community-based *mutuelles* underprice their coverage and must provide volunteer labor to conduct claims administration. If, in the course of the universal health coverage strategy, the government develops more community-based *mutuelles*, it should be encouraged to contract provider payments and claims administration with commercial insurers. This would allow the private insurers to achieve greater scale and help keep administration rates down. The private commercial insurance sector also has the underwriting expertise needed to help the government design and appropriately price coverage packages that can make universal coverage possible.

The government should also enlist the support of nonprofit and community-based organizations in the promotion of the universal health scheme to increase awareness among Ivorians of the need for managing health risks and prepaying for coverage rather than paying health expenses out of pocket at the time of treatment.

The private commercial sector should lobby the government to ensure that the national health insurance scheme not only covers user fees in the public sector, but also offers coverage for providers in the private commercial sector and that insurance payments will cover the true costs of provision in the private sector. Increasing the ability of consumers to purchase services in the private sector will be critical to developing the private health sector and reducing the burden of clients on the public sector. Since patients with more ability to pay in the private for-profit health sector are more likely to choose private providers, increasing patients' ability to pay will ensure more equity in the health system.

Finally, with respect to HIV and AIDS services, while combining health providers and health purchasers is generally to be avoided, replication and strengthening of CIRBA's provider-based *mutuelle* model is another way of increasing the ability of patients on ART to receive treatment in the private for profit sector. To ensure that private providers don't underprice their coverage, commercial underwriters should be used to design a coverage package of basic care that includes treatment for opportunistic infections. To protect against provider failure, public sector or donor funds could be used to create a reinsurance fund that will cover losses due to short-term overutilization or reimburse patient premiums if providers cannot maintain their services.

6.2.3 SOCIAL FRANCHISING PPP

One of the most common PPP models that leverages private facilities is the social franchise. In the social franchise, a franchisor, usually a nonprofit organization using government or donor funding, contracts with private for-profit service providers to provide a range of services at a reduced price and according to defined standards. The franchisor generally provides a range of support services to the franchisees (private providers) to allow them to offer the services effectively, including training, subsidized products, and quality supervision. In return, the private providers agree to maintain quality standards, report their service statistics to the franchisor, and in some cases pay a franchising fee to the franchisor to help cover the costs of the supports provided. When quality assurance mechanisms are in place and a critical number of franchisees are established, the franchisor typically markets the franchise brand to encourage consumers to visit clinics that carry the franchise brand. This model has been very popular as an extension to social marketing programs, particularly for the provision of family planning services. While less common, HIV and AIDS services have also been socially franchised through organizations like PSI and FHI for the provision of HCT and ART. One of the advantages of the social franchise is that it leverages investments that the commercial provider has already made in a clinic, medical supplies, and trained staff. For the incremental investment in quality improvement and supervision, the social franchisor is able to deliver more services at a lower cost than if public or donor funds were used to start an entirely new service facility.

Given the growing number of private service providers in Ivory Coast, and the need for quality improvement, the potential for a social franchise is strong. A number of the programs visited have the potential to serve as a component of a social franchise. These are described below.

AIMAS: AIMAS is the national NGO that manages the national social marketing program with funding from the German development bank, KfW. In its upcoming phase of funding, AIMAS is

planning to establish a social franchise for family planning using its relationships with private clinics that sell AIMAS family planning products. AIMAS says the French Development Agency (AFD) is also expected to provide funding and there will be a particular focus on long-acting and hormonal contraceptives. AIMAS is still in the process of designing its social franchise package and hiring the staff needed for training and supervision of providers. Once this social franchise is established, it may be possible to add HIV and AIDS services into the package of services that is socially franchised. One of the lessons learned from the implementation of the social franchise model is that franchises are more effective and more cost-efficient when multiple services rather than just one or two are franchised. Covering a wider range of services means that the franchisor benefits cover more clients and more sources of revenue for the private providers, so they are more likely to value the support from the franchisor and be more willing to adhere to the quality standards imposed by the franchisor.

PNPEC/NGO Partner: One of the critical components of a social franchise is the accreditation and quality assurance component. For obvious reasons, the franchise cannot accept any provider into the scheme; the provider must have the appropriate qualifications, adequate space and equipment, and good management practices. Before inviting providers into the franchise, the franchisor typically accredits providers as being qualified. In Ivory Coast, the process by which PNPEC conducts its situational analysis of facilities and the process by which some of the partner NGOs like ACONDA have recruited facilities to participate as an approved treatment center constitute an accreditation system. An effective accreditation scheme involves periodic inspection and supervisions to ensure that providers are maintaining their capacity and weaknesses are identified and corrected. PNPEC has also been performing this function. One option for a social franchise of ART providers would be to have PNPEC, or its designated representative, act as the accrediting agency for all providers invited into the social franchise. In addition to being the public sector's contribution to the social franchise, it would reassure the MOH that all private providers of ART were meeting required quality standards.

CIRBA: CIRBA has been working with private for-profit providers in the Abidjan area to allow them to retain their patients on ART by providing them with the lab support and ARVs to treat their patients. In addition, CIRBA provides training in various aspects of HIV to enable these providers to become better diagnosticians and providers of ART care. The patients are also treated at CIRBA's clinic, but for regular, routine care the patients visit their own private provider. This informal arrangement has some important elements of a social franchise and shows the advantage of working with existing private providers. While in other cases patients who are detected to be HIV positive in the private sector are automatically referred to a government treatment center, in the case of the providers working with CIRBA, the provider retains the patient. This allows the private provider to stay in business and ensures that the client flow at CIRBA is manageable. The patients only visit CIRBA when special diagnosis or care is required and do not burden CIRBA with routine care that their primary doctor can provide. CIRBA also provides these providers with ARVs from its stock so they can dispense medicines to their clients.

PSP: Another key element of a social franchise that is attractive to private providers is their ability to have access to quality products and supplies at an affordable or subsidized price. In the case of an ART social franchise, franchisees would need to receive subsidized ARVs, rapid test kits, and CD4 reagents in order to be able to adequately serve their patients. Under the current system, private providers are not authorized to receive the high-quality drugs and supplies procured for PSP by PEPFAR and other donors. The few private for-profit providers (e.g., PISAM, Polyclinic 2 plateau) that do receive these inputs do so through an informal arrangement with ACONDA; however, there is a process by which facilities can receive

medicines and supplies directly from the public sector stocks of PSP. In the case of ARVs, facilities request approval from PNPEC and after PNPEC has conducted its situation analysis, it requests PSP to give a PSP code to the provider. This code allows the provider to receive ARVs, subject to maintaining quality standards and reporting on use of the ARVs. For the social franchise scheme to work, PSP would have to expand this system to a greater number of private providers or delegate this authorization to another franchisor organization.

6.2.4 PPP FOR COUNSELING AND TESTING

Given the gap in the demand for counseling and testing and the need to reduce the unmet need for ART by making more people aware of their HIV status, more private providers should promote counseling and testing among their patients. One reason some clients do not get tested is that they are not comfortable going to a public sector or NGO run testing site. A number of informants suggested that patients in the upper and middle classes would prefer not to get tested than to go to a public sector site. By making counseling and testing more available in the private for-profit sector, more patients can be brought into the health system and more HIV-positive people can be identified.

New approaches to offering HCT should be considered. PSI has shown some success in reaching people in need of testing through its mobile HCT units, which it operates with donor funding. This model could be made more sustainable and more efficient by contracting out mobile units to private facilities that have the staff and capacity to conduct HCT in a mobile setting. Currently, the full cost of the vehicle operations, the testing inputs, and the staff are supported by donor funds. The cost of the vehicle and staff are fixed costs that are not being amortized when mobile operations are not being conducted. When the dedicated mobile units are not enough, PSI or another organization specializing in HCT could contract out to private facilities that have staff trained in HCT and these facilities would be compensated on a performance-based scheme. This would allow the private for-profit provider to “sell” some of its excess capacity in staff and equipment and allow the HCT contractor to purchase more HCT services at a lower cost and on a more flexible basis. At the outset, some initial investment in training private facilities to conduct HCT to desired standards might be required, but over time, once a pool of qualified HCT providers was created, competition between the facilities would serve to keep the contracted cost to a reasonable level and below that of funding an NGO for all of the costs.

6.2.5 SUPPLY CHAIN PPP

In the area of supply chain and logistics, the public and private sectors have very little contact and do not share resources, formally or informally. If both systems performed well in reaching consumers through separate channels and each served as the back-up to the other, this separation might be desirable. However, a severely underperforming public sector supply chain is currently working alongside a high-performing private sector supply chain with additional capacity and when the public sector supply chain fails, there is no way for consumers in the public sector to benefit from the capacity in the private sector. In the current situation, a number of PPPs might be explored to improve access and efficiency. One of the key weaknesses in the PSP system that is not likely to be solved, even after reform, is the failure of health districts to accurately track stocks and make accurate forecasts that can be fed into the national procurement plans. Efforts to address this have focused on training of district staff, but training is not likely to overcome problems of staff motivation and frequent turnover. One strategy to solve the problem involves moving from a pure pull system (in which national orders are

dependent on the requests from district and subdistrict levels) to more of a push system in which frequent deliveries are made of the most commonly used medicines and the delivery team providing the stock also records stock on hand and consumption. This delivery team topping-up approach has been shown to be more cost-effective in Zimbabwe (David Sarley and al. 2010) for key medicines and could easily be contracted out to the private commercial sector since this push approach is often used by private wholesalers. Another possibility for improvement in PSP's system involves contracting out deliveries from PSP's six regional warehouses out to district pharmacies or even public facilities themselves. This would leverage existing transport capacity in the private sector, lower delivery times, and reduce stock-outs. One major constraint in this approach is that the current financial crisis has made pharmaceutical wholesalers or transport countries unlikely to bid on a PSP tender out of fear that they would not be paid in a timely fashion. Until the New PSP's financial credibility is established, it is unlikely that any partnerships with the private sector can be established.

6.2.6 PPP IN HUMAN RESOURCES

In nearly all visits to private sector facilities, the assessment team noted that employment of public sector employees in the private sector was a very common practice. Although there is no formal policy concerning dual practice, the government at least tolerates it and in some cases seems to encourage it. Some of the larger university hospitals which have more doctors than they need and more than their budget will allow, are reported to encourage their excess doctors to work in the private sector. Several of these organizations employ public sector employees who maintain their civil servant status. These include AIBEF (12 health personnel from the public sector in different facilities), ACONDA, CIRBA, *Côte d'Ivoire Prospérité*-CAMES, Clinic Wale in Yamassoukro, Centre Migrons in Aboisso, and RSB. In some cases, medical staff have formally requested a temporary leave of absence from the public sector to work in the private for-profit or nonprofit sectors. More often, medical staff simply obtain an informal agreement from their supervisors to allow them to work during hours outside their public sector obligations in private facilities. There is also significant evidence of physicians, in particular specialists, absconding from their public post in order to work in private practice.

The advantages of a formal partnership between the public and private sector to permit private employment of public sector employees are numerous. For the public sector, it relieves the burden of too many clients in the public sector clinic, increases consumers access to services by allowing more private facilities to operate, allows public sector employees to gain more experience and, in many cases, allows them to work under better conditions and to higher standards of care. For the private sector, a formal partnership offers the advantage of being able to access qualified staff in a flexible manner and reduces their labor costs, allows the private facility to take in more clients, and allows the private facility to benefit from professional training provided by the public sector at no cost to the private facility.

At the same time, there are risks that cannot be ignored. Some public sector providers may be tempted to put in less time than they are obliged to in the public sector and essentially abandon their posts and their patients for more lucrative work in the private sector. Doctors may refer patients to their private sector facilities where patients have to pay for the same consultation they could have received free in the public sector, thereby increasing the financial burden on patients. For these and other reasons, the MOH needs to establish and enforce a formal policy that permits but restricts dual practice. If the government does make an effort to increase the number of private facilities offering ART and other HIV services, allowing dual practice will facilitate this evolution since most of the providers with direct experience in provision of ART are in the public sector.

6.2.7 PPP FOR HEALTH INFORMATION SYSTEMS

The DIPE has benefitted from partnerships with ACONDA in the use of database software for tracking of HIV and TB patients, first with SIGVIH and later with SIGDEP. DIPE also benefitted from the expertise of a commercial information technology provider, SILICON WISE. On a decentralized level many NGOs and COSCI have been involved in ensuring better reporting of health information from NGOs to the district level.

One area where there is the greatest need for new PPPs is in developing a national tracking system for people receiving ART. In the current system, each treatment site has its own database for tracking ART and PMTCT patients, but these individual databases do not communicate with each other. Part of the problem with patients who drop out of treatment may in fact be a problem of treatment transfers that are recorded as drop outs at one treatment site and new patients at another treatment site. The national treatment program could benefit from expertise in information technology that will allow independent treatment sites to buy into a common database system. The national treatment program can manage this database to get a global view of the national treatment activities. At the same time, such a program must be flexible enough to track patients who change treatment sites or simply move around.

Commercial insurance companies in Ivory Coast have developed unique identifiers for their subscribers to be able to receive treatment from any one of the insurer's approved providers and still allow the insurer to track treatment received by the subscriber in different locations.

7. PRIORITY INVESTMENTS TO IMPROVE THE PRIVATE HEALTH SECTOR

The following section highlights potential areas for investment by the government and its financial partners, as well as the private commercial sector. The assessment team recommends that these investments be prioritized to encourage growth in the private sector to enable it to make a more substantial contribution to public health in Ivory Coast, especially in support of the national AIDS response.

7.1 CREATION OF A PLATFORM FOR PUBLIC-PRIVATE DIALOGUE

For virtually all of the reforms recommended in this report, some level of consultation with the private health sector is necessary. However, the government has never established a formal institutional or legal framework for a consultation process. The only explicit attribution within the MOH with respect to the private sector is the regulatory mandate of the DEPS. Rather than leave it to the private sector to seek out different authorities in the MOH on various technical issues, the MOH should create a unit tasked with interfacing with the privates sector or assign the responsibility for private sector engagement to a unit within the ministry. This unit will then act as the gatekeeper to the private sector for all departments and administrative units within the MOH, and this unit will be the private sector's single entry point to the MOH for all issues of interest.

Experience from other countries in establishing public-private units within the MOH shows the benefit of facilitation by an "honest broker" who can help build trust and transparency between the public and the private sector. Hiring an independent facilitator of this sort may be best done by a donor partner of the government.

7.2 CREATION OF A SOCIAL FRANCHISE/PROVIDER NETWORK FOR HIV AND AIDS SERVICES

As previously suggested, a number of factors in Ivory Coast are favorable for the creation of a social franchise to provide quality HIV and AIDS services. The need to improve quality of providers in the private sector and the government's need to reduce its dependence on external funding are potential justifications for the creation of a social franchise. The advantage of the franchise/provider network model is that it would mobilize investment from donors, a nonprofit franchisor, and the private sector clinics and possibly pharmacies who would be a part of the social franchise. An initial investment would be needed to establish the franchisor and this could be done through a solicitation of interested organizations on a competitive basis. Ideally the franchisor/network manager would be a local organization with direct experience in the provision of HCT, ART, and PMTCT services and access to subsidized ARVs. The package of support offered by the franchisor would depend on the level of investment to start the franchise, and Table 14 illustrates one way of dividing responsibilities.

TABLE 14: SOCIAL FRANCHISE/PROVIDER NETWORK MODEL

	Franchisor/Network Manager (Nonprofit)	Franchisees/Network Members (Private Clinics)	Government and Donors
Contributions	Training, delivery of subsidized HIV commodities, supportive supervision and quality monitoring, promotion of the franchise brand.	Clinic infrastructure and staff, franchising fee, timely reporting of data.	Funding, norms and standards for treatment and quality standards, standardized reporting database.
Benefits	Donor funding, expanded reach.	Access to subsidized training and commodities, new patients	More patients treated at a lower cost. New HIV+ patients being detected and recruited into treatment.

Ideally, the social franchise/provider network would be piloted in no more than three regions with 30–40 providers and would be closely monitored for quality performance and cost. Delivery of ARVs could be done through the treatment centers, but this would mean the franchisor/network manager would also have to act as a wholesaler of commodities, a model that may not be scalable. Another variant to address this problem would be to have ARVs distributed by pharmaceutical wholesalers to pharmacies in the catchment areas of the franchised clinics and providers would prescribe ARVs to patients who would obtain them from the local pharmacy. In this case, the wholesaler and pharmacy would have to be paid a handling fee since it is assumed that the drugs will still be free to the consumers.

7.3 EXPANSION OF RISK POOLS TO INCREASE HEALTH COVERAGE

As previously noted, the fact that the government has begun a process of designing a universal health coverage scheme is a positive development. Experience in most countries has shown that the private for-profit health sector cannot expand effectively unless health coverage is growing. The universal coverage strategy will involve many strategies and activities, including generating of new tax revenues to pay for the scheme and new ways to enroll consumers. The biggest challenge for such schemes is usually the enrollment of consumers who work in the informal sector and have small, irregular incomes. Community-based *mutuelles* are one of the best ways to reach consumers in this category and the team recommends that donors and the government invest in strategies to create and scale up more community-based *mutuelles*. At the same time, Ivory Coast would do well to avoid the pitfalls observed in other west African countries in the creation of *mutuelles,* such as the following*:*

- Typically, in the interest of keeping premiums affordable, the package of benefits that can be funded from premiums is too small. Even if the premium is affordable, if the coverage is too superficial, no one will want it. A more generous package of benefits needs to be designed and costed appropriately. At that point, if the premium needs to be subsidized to get more enrollees into the *mutuelle*, the government or donors can determine a level of subsidy. Ideally, the government should hire qualified actuaries to design three or four coverage packages, and

when *mutuelles* are created, they can decide which of the *mutuelle* packages they want to purchase.

- The other pitfall is that in the interest of keeping operational costs down, many *mutuelles* do their own claims administration and provider liaison on a volunteer basis. As the *mutuelle* grows, this work becomes too much and too complex for untrained volunteers. As a part of the government and donor packaging of *mutuelle* schemes, private commercial insurers should be recruited to do the claims administration and provider review for a reasonable percentage.

There are many donors and organizations with experience in the design and development of community-based *mutuelles*, including the Belgian Cooperation, the Swiss Cooperation, USAID, the International Labor Organization, and GTZ. To expand coverage in the informal sector while the universal coverage scheme is being rolled out, the government and such partners could develop new, more sustainable approaches to community-based *mutuelles*.

7.4 LOCAL PRODUCTION OF ARVS

As noted above, Ivory Coast is fortunate to have a growing pharmaceutical manufacturing sector. With a number of the units achieving Good Manufacturing Practices status, it is not unreasonable for the government to want to develop this capacity for local and regional consumption. For the AIDS response, production of ARVs is a reasonable medium-term goal. Donors such as the World Bank, the International Finance Corporation, and WHO could provide technical assistance, commercial loans to the manufacturer, and support for the government to regulate the manufacturer and test the quality of production.

8. CONCLUSION

As Ivory Coast emerges from a lost decade of internal conflict and builds the foundation for robust growth, the country has a unique opportunity to build a private health sector that is a major contributor to public health in general and to the national HIV and AIDS response in particular. As incomes grow, spending on health will grow, but for increased spending to produce better health outcomes, the public and private health sectors need to work together in one well-designed health system.

This assessment report has reviewed the current situation in each of the health system building blocks and while there are good intentions and some interesting possibilities, overall, the level of integration of the private sector into planning, information systems, quality assurance, and supplies of medicines is very limited. This lack of integration leads to dysfunction, inefficiencies, and poor health outcomes.

It is the assessment team's hope that this report and its findings will serve as a catalyst to stakeholders in all sectors to come together, debate the issue, identify solutions, and forge new levels of cooperation to create a high-performing health system that is worthy of a new and stronger Ivory Coast.

ANNEX A: MODEL ASSUMPTIONS AND ART CASES AND COST PROJECTIONS

The model used to project private sector contributions is a simple, linear model that does not consider factors affecting the epidemic that would impact HIV prevalence, and as such this model should not be considered a reliable predictor of how the prevalence or the number of new cases will grow. The purpose of the model is to illustrate how the private sector could support treatment costs, assuming current rates of growth in cases.

Treatment costs were estimated using data from the HIV/AIDS Program Sustainability Analysis Tool study in 2009 and were assumed to be the same for public and private sector, with the exception of labor costs. This was based on the assumption that private sector providers could receive public sector commodities and pay for them at cost to PSP. This will ensure public sector control on HIV drug and consistency of regimes, as well as keep costs lower in the private sector.

Table A-1: Assumptions Informing the Models

Workforce	**Optimistic**	**Realistic**	**Pessimistic**
Adults	12,635,342	12,635,342	12,635,342
Workforce Participation	71%	71%	71%
Formal Sector	2,527,068	2,527,068	2,527,068
Adult Population Growth Rate	2.0%	2.0%	2.0%
Formal Sector Workforce Growth Rate	6.0%	4.0%	2.0%
% Formal Sector Workers Insured	90%	75%	60%
Adults Insured Per Worker	1.9	1.7	1.5
HIV			
Adult Prevalence	3.7%	3.7%	3.7%
Infection rate	0.3%	0.3%	0.3%
Formal Sector Prevalence	3.0%	3.0%	3.0%
Informal Sector Prevalence	4.4%	4.4%	4.4%
% HIV Infected Starting ARV's---Annual	12%	12%	12%
On ARVs at Start Total	89,410	89,410	89,410
Private	200	200	200
Public	89,210	89,210	89,210
Annual Mortality on ARVs	10%	10%	10%

Table A-2: Cost Factors for the Models

Cost Factors		
Unit Costs	**Public**	**Private**
ARV ist line/yr..	$448	$448
ARV 2nd line/yr	$788	$788
CD4	$70	$150
Viral Load	$210	$210
Other Labs	$150	$150
MD Visit	$25	$41
Nurse/Counselor Visit	$12	$20
Other Drugs	$500	$1,000
Frequency		
First Year		
% ist line	95%	95%
% 2nd line	5%	5%
CD4	2.5	3
Viral Load	0	2
Other Labs	1.5	3
MD Visit	3	4
Nurse/Counselor Visit	10	2
Subsequent Years		
% 1st line	80%	75%
% 2nd line	20%	25%
CD4	1.5	2
Viral Load	0	2
Other Labs	1.5	2
MD Visit	2	3
Nurse/ Counselor Visit	6	2
Inflation rate	5.10%	

Figure A-1: Pessimistic Projections for Growth in ART Cases

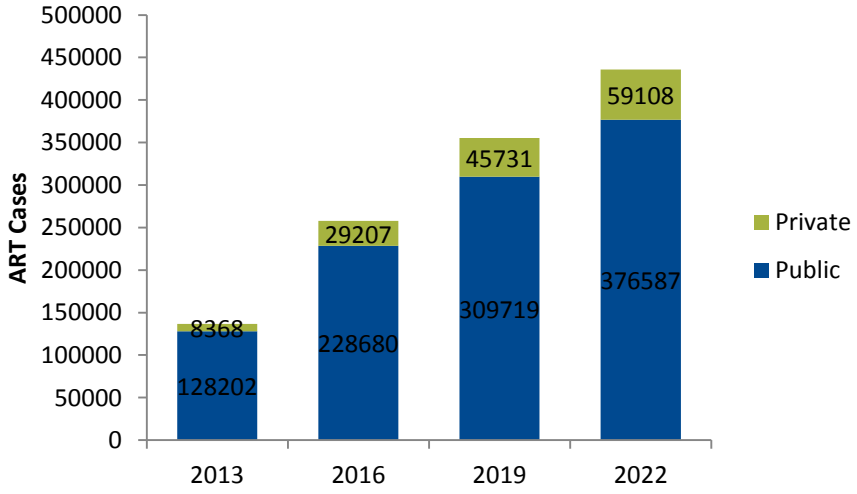


Figure A-2: Pessimistic Projections for ART Costs

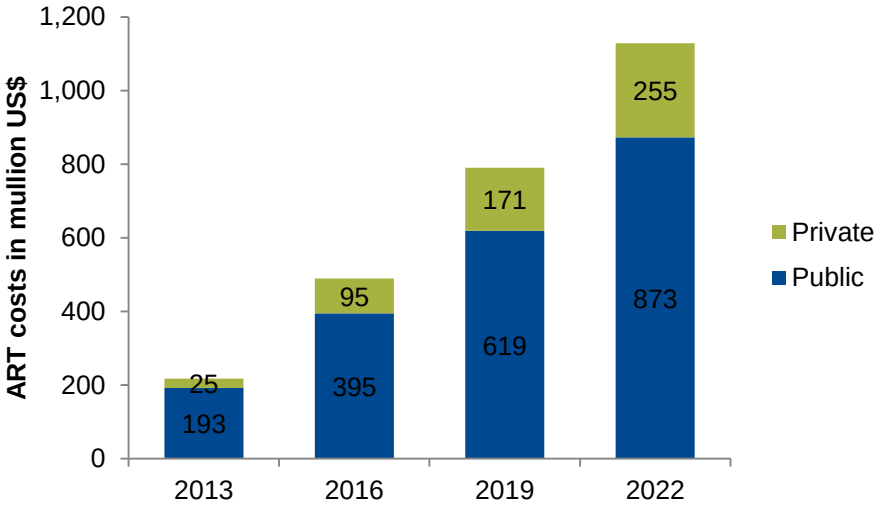


Figure A-3: Optimistic Projections for Growth in ART Cases

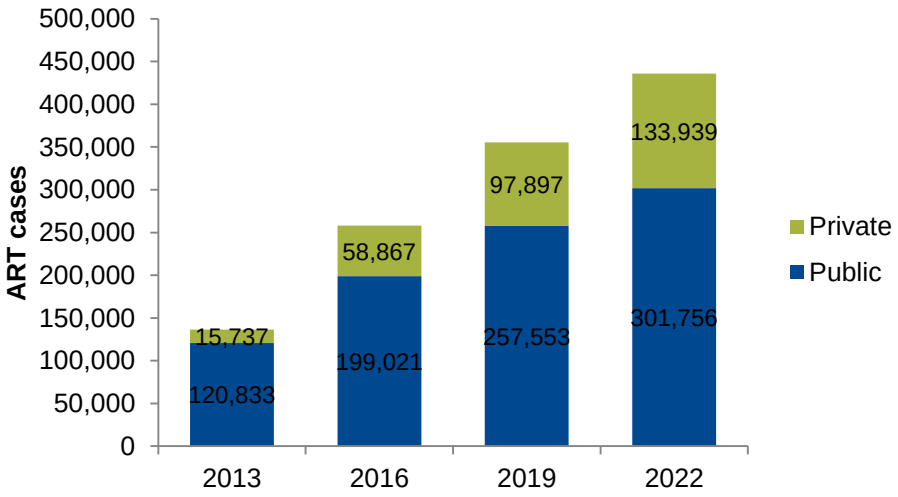
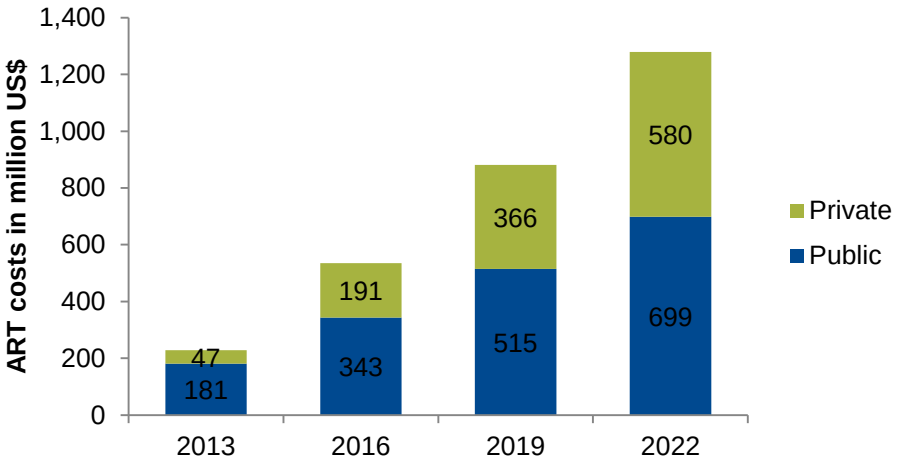


Figure A-4: Optimistic Projections for ART Costs



ANNEX B: SCOPE OF WORK

I. GOAL AND OBJECTIVES

Goal

The purpose of this activity is to carry out an assessment of the private health sector in Ivory Coast, with a particular emphasis on HIV and AIDS services provision, and to develop recommendations to guide the strengthening of HIV and AIDS services across the public and private sectors. Together, the assessment and recommendations will help guide the President's Emergency Plan for AIDS Relief's (PEPFAR) strategy and investments in health systems strengthening in Ivory Coast.

Objectives

The assessment will document and/or evaluate several key components of health services provision in the private sector, including the following:

1. Private health sector stakeholders and their roles
2. HIV- and AIDS-related details on the flow of patients/clients, service cost, health care providers, commodities, and data between the private and public sectors
3. The location and density of private sector facilities and the services they offer, especially those related to HIV and AIDS, as well as the supply and demand for private sector provision of HIV- and AIDS-related health products and services (at corporate/workplace infirmaries, *Polyclinique International Saint Anne-Marie* , *polycliniques*, etc.)
4. Level of policy dialogue between the public and private health sectors
5. Existing and potential opportunities for public-private partnerships (PPP) in health that add measurable value to PEPFAR's core business in Ivory Coast
6. Clear recommendations on how best to operationalize a select number of PPPs focusing on partnerships between the U.S. Government/PEPFAR and mobile phone operators in Ivory Coast.

II. APPROACH AND ACTIVITIES

A multidisciplinary team will conduct the private sector assessment. The assessment process will entail a literature and secondary data review, targeted stakeholder meetings, key informant interviews (including public and private), and field visits to private sector facilities and initiatives.

Specific tasks include the following:

Determine the size, scope, and scale of private sector providers in Ivory Coast

- **Assess the diversity and distribution of private sector, for-profit providers** and other health sector entities through an initial mapping and surveying exercise:
    - Obtain lists of private health sector facilities through review of the Ministry of Health (MOH) and AIDS Control registries and interviews with key stakeholders such as private provider associations. If possible, formulate a rough estimate of the number

or percentage of private health sector facilities that are not currently registered with MOH.

  - Visit a range of facilities, focusing on for-profit and nonprofit hospitals, networks of clinics, and pharmacy and pharmacy depot networks in order to gain insight into the state of the private health sector in Ivory Coast.
  - Hold focus groups with a range of private providers, including doctors, nurses, and pharmacists in order to better understand the kinds of services and commodities they provide, the licensing and regulatory environment for operating a private health facility, and issues they face in terms of procuring commodities, obtaining clients, participating in continuing medical education, and accessing finance. These interviews may also provide insight into the demand for HIV and AIDS services within this sector and the factors influencing demand for and supply of private versus public sector services.

- **Meet with key provider network associations** such as those of *médecins* and *pharmaciens*, as well as nongovernmental organization networks and faith-based organization networks to understand their roles. These interviews will seek to better understand the size and scope of the private medical sector, the resources available to private providers in terms of access to training and continuing medical education, any commodity distribution systems that might be available to private providers through these associations, and the overall policy environment in which they operate.
- **Understand the private sector role in supply chain**, primarily through interviews with private sector pharmacists and drug manufacturers, wholesalers, and distributors. These interviews hope to yield information on the kinds of commodities provided by private retail pharmacies, especially as they pertain to HIV and AIDS, any issues that exist with accessing a constant supply of these commodities, and the regulatory environment both for accessing commodities and for operating a health facility.
- **Identify demand for services and products** through in-depth Demographic and Health Survey (DHS) data analysis, as well as focus groups with consumers, to better understand consumer preferences and health-seeking behaviors in regards to the private sector.

Assess the policy and regulatory environment for private provision of health products and services

- Assess the level of cooperation and exchange between public and private sector providers.
- Examine existing policy and regulatory frameworks and other environmental factors impacting the private sector provision of health products and services. Determine the mechanisms for accrediting, regulating, and monitoring private commercial providers of health products and services and their relative effectiveness.
- Analyze health care reforms or other government-led initiatives that may impact private providers.
- Assess the levels of policy dialogue between the public and private sector, existing PPP arrangements in the health sector, and opportunities for further engagement and cooperation between the public and private sectors.

Identify opportunities and recommendations for public-private partnerships in health

- Identify ways to link or strengthen links between the private health sector, public sector, and relevant U.S. Government/PEPFAR or other donor programs.
- Explore opportunities to involve private sector actors, such as mobile phone operators, in the sustainable delivery of health services.

Based on the assessment findings, the assessment team will provide a range of options and recommendations for consideration by U.S. Government/PEPFAR and other stakeholders (including identifying potential formal PPPs) to further engage the private sector in Cote d'Ivoire.

III. SUGGESTED METHODOLOGY

Step 1 – Finalize plan of action: Work with USAID/Ivory Coast to finalize the Detailed Plan of Action, including the transfer of Health Systems 20/20 staff and assets to the SHOPS project, the scope of the assessment, agreement on key survey questions, and schedule and timeframe.

Step 2 – Conduct general background literature review and research: Conduct background research using secondary research sources, secondary data analysis of DHS, National Health Accounts, and/or other sources, and interviews conducted prior to the first in-country visit. Use background research to inform team members of the state of the private health sector in Ivory Coast, including but not limited to the provision of HIV and AIDS services, public and private sector health expenditures, and access to finance for the private health sector.

Step 3 – Conduct country assessment: Send a team to Ivory Coast to conduct a 2-3-week assessment. The following components will be included in the team's assessment methodology.

Key Informant Interviews: Conduct qualitative, in-depth interviews with key stakeholders and partners. Key informants should include, but not be limited to, the following:

- USAID/Ivory Coast staff
- U.S. Government counterparts including the Centers for Disease Control and Prevention (CDC)
- Implementing partners (contractors and cooperating agencies) working on private sector initiatives
- USAID/Washington staff backstopping the Ivory Coast Program
- A cross-section of private providers (such as *Polyclinique Internationale Sainte Anne-Marie*) that includes general practitioners and pharmacists in rural, peri-urban, and especially urban areas
- Private and commercial enterprises, including professional associations, pharmaceutical manufacturers, and health insurance companies
- Private and commercial financial entities such as banks and microfinance institutions
- Key government of Ivory Coast staff, including staff in departments overseeing the planning, implementation, and evaluation of the HIV and AIDS response
- Divisional and/or regional health authorities
- Other multilateral donors supporting the health sector (including AFD, United Nations, Department for International Development)
- Private corporations with workplace infirmaries and other workplace wellness programs

- Professional medical, nurses, pharmacists, bio-laboratory associations, and other private health sector associations
- Data collection and research firms.

Field Visits: The assessment team will visit field sites where private sector initiatives are underway. The team will visit urban, rural, and peri-urban health facilities ranging from informal shops to clinics to hospitals in order to carry out its initial data collection.

Data Analysis: The team will conduct analysis of data collected during key informant interviews, focus groups, and field visits in real time, and improvise and adapt their assessment schedule as needed based on findings or new information.

Step 4 – Write report and disseminate information: The assessment team will write a draft report for USAID/Ivory Coast staff review. Upon receipt of comments from USAID/Ivory Coast, the team will revise and finalize the report accordingly. The report will then be disseminated through multiple channels, including the stakeholder dialogue process. Total time for report writing, receipt of comments, dissemination, and finalization of report will be two months, to commence upon return from the field visit.

Key Stakeholder Meeting (optional): Conduct a stakeholder meeting with key decision makers such as the MOH, USAID, CDC, and representatives of private sector entities to vet findings and recommendations, and determine if stakeholders have additional issues. This is designed to increase the likelihood that the assessment's findings and recommendations will be used by stakeholders and to ensure greater relevance of the assessment results.

IV. DELIVERABLES

Final SOW: This will be developed in consultation with USAID/Ivory Coast in advance of the assessment visit, and include the following:

- Team composition, roles, and responsibilities – team will include Abt Associates HQ staff as well as in-country partners
- Assessment budget, including dollar amount of field funding
- Relationships and responsibilities (regarding key points of contact, logistical arrangements, scheduling of meetings and appointments, etc.) of assessment team and USAID/Ivory Coast
- Timeline and level of effort

Debriefing Meeting: The assessment team will hold a debriefing meeting with USAID/Ivory Coast and USAID/Washington staff to present the major findings and recommendations of the assessment.

Assessment Report: The assessment team will provide USAID/Ivory Coast with a final assessment report, which will include an executive summary, scope and methodology used, important findings and conclusions, recommendations, and opportunities for future investment/support.

V. DURATION, TIMING, AND SCHEDULE

It is anticipated that the period of performance of this assessment will be approximately seven months, including preparation time in Washington, one or two in-country visits, and report writing, production, and dissemination.

Activity	Sept. 2012	Oct. 2012	Nov. 2012	Dec. 2012	Jan. 2013	Feb. 2013	March 2013
Step 1 – Finalize Plan of Action							
Transfer of Health Systems 20/20 staff and assets to SHOPS	X						
Finalize SOW	X						
Secure team members and recruit consultants	X						
Identify key research questions	X	X					
Identify key stakeholders	X	X					
Schedule meetings with key stakeholders	X	X					
Step 2 – Conduct General Background Literature Review and Research							
Conduct background research & document review	X	X					
Develop questions tailored to specific stakeholders	X	X					
Step 3 – Conduct Country Assessment							
Conduct key informant interviews		X	X				
Conduct field visits		X	X				
Conduct focus groups		X	X				
Conduct data analysis		X	X				
Step 4 – Write Report and Disseminate Information							
Develop outline for report			X				
Vet preliminary findings and recommendations with in-country stakeholders			X				
Conduct analysis and draft report				X	X		
Submit report to USAID and key stakeholders for comment prior to dissemination					X		
Disseminate findings to stakeholders in Cote d'Ivoire (key stakeholder meeting - optional)						X	
Finalize report							X

ANNEX C: STAKEHOLDERS CONTACTED

Sector	Organization/Entity	Interviewee/Title
Public/Government	MOH/Directorate of Health Facilities and Professions	Toure Nabala, Director Kokola Aye Jacot, Deputy Director for Public and Private Facilities
	MOH/HIV/AIDS Directorate General	Konan Koko Regina, Director/DPECTS Kla Christian, Director/DMRLS Oula P. Ange, Physician
	MOH/Directorate of Human Resources	Konan Kouassi Laurent, Deputy Director for Careers Management/Technical Reform Section Coordinator
	MOH/National Program for PLWHIV Care	Traore Ettiegne Virginie, Director/Coordinator Kahon Serges, Physician, TA
	Public Health Pharmacy (Pharmacie de la Sante Publique)	Yapi, Director General Kodo Kristel, in charge of ARV
	MOH/Directorate for Information, Planning, and Evaluation	Gohou Kouassi Valerie, Director
	Gbéké /Regional Health Directorate	Koffi N'Guessan, Regional Director Inagbe, Chief of Medical Services
	Bélier/Regional Health Directorate	Gaston Tra Alain Frederic K., Regional Director Lehe Bi Lucien, Department Director

	Abengourou/Departmental Health Directorate	Kouakou Affoue, Department Director Bohoussou Kindo, Health Services Manager and Communications Focal Person
	Aboisso/Departmental Health Directorate	Ghinana Frederick, CSE (chargé du suivi-Evaluation)in charge of M&E Gahourou Jerome, CPEV (Chargé du Programme Elargi de Vaccination) in Charge of Sensitization Program
Private Facilities Private Commercial	Institut Clinique AMI	Borges, Director Coulibaly Fousseny, General Secretary
	Polyclinique II Plateaux	N'Goran Kouadja Eric, Physician
	Clinique Sainte Marie/Yopougon	Kouadio Brice, Nurse
	Clinique Kouiland	Lehou Faustin, Physician
	Clinique Medical La Marguerite	Ehouman Kouame Rene, Manager
	Clinique Sophia	Aloa Jean-Marc, Resident Physician Edoukou Tanoh, Administrator
	Clinique Yé N'Gouan	Kouassi Sangne, Promotor
	Clinique M'Moh Kanga Simone	Ebah Kouadio, Manager
	Infirmerie Saint Vincent du Foyer	Ano Cecile, Manager
	Maternité Beon Bethel	Oulou Marie Agnes N., General Manager
	Cabinet Medical Chenal	Henri Chenal, Director
	CMENA Clinic	Patrice Kouakou, Physician
	Clinique Sainte Famille	Aka Sablin, Manager

		N'Guessan Kouakou, Resident Physician
Workplace clinics	Clinique Entreprise FIBAKO	Marc N'Guessan, Nurse
	Service Médical de la SOTRA	Eliane Tiabas-N'Da, Deputy Director for Hygiene and Health at Work
	Service Médical NESTLE-CI	Bouaffon Eric, Company Physician
	Service Médical MTN	N'Guessab Eholy Thomas, Company Physician
	Centre Medico-Social d' Ehania	Adou Valentin, Nurse,
NGOs	Renaissance Santé Bouaké	Keita, Programs Director Konan Matheran, Chief of Staff
	Ruban Rouge	Yao Amon Kouadio Aubin, Coordinator Alain Michel Kpolo, Internal Director Evit Eny Bertrand, Prevention Coordinator Dabeli Bethold, Physician
	RIP+	Bayeto Claude, Director Lefrey Sangahi Lezou Jean, Programs Director Kouassi Agnes, In charge of PMTCT and Gender
	ACONDA	Bertin Kouadio, Finance and Administrative Director of Programs Akpro, Deputy Finance and Administrative Director of Programs

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Pharmaceutical	CIPHARM	Assane Coulibaly, Pharmacist, Assistant General Manager Dr. Coulibaly, Industrial Director
	Pharmacie Saint Jean	Stephan Koffi, Pharmacist
	Pharmacie des 220 Logements	Kouassi, Pharmacist
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	Ordre des Médecins	Koko Georges, Deputy Secretary
	Association des Societes d'Assurances de Cote d'Ivoire (ASACI)	Dicko Balamine, Permanent General Secretary
	Association des Producteurs Pharmaceutiques	Dr. Coulibaly, President
	Syndicat National des Pharmaciens Privés de Côte d'Ivoire	Kouame Christophe, Bureau Member
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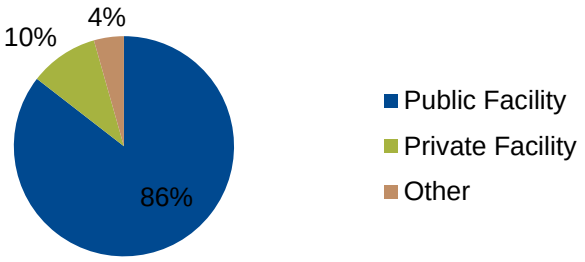
ANNEX D: ADDITIONAL DATA ON THE IVORY COAST'S PRIVATE HEALTH SECTOR

The 2005 AIDS Indicator Survey provides a useful perspective on the Ivory Coast private health sector. This annex reveals useful information regarding the Ivory Coast's private health sector that can be found in the 2005 AIDS Indicator Survey. The statistics reveal the patterns of public and private sector facilities for HIV and AIDS services as well as deliveries and sexually transmitted infections.

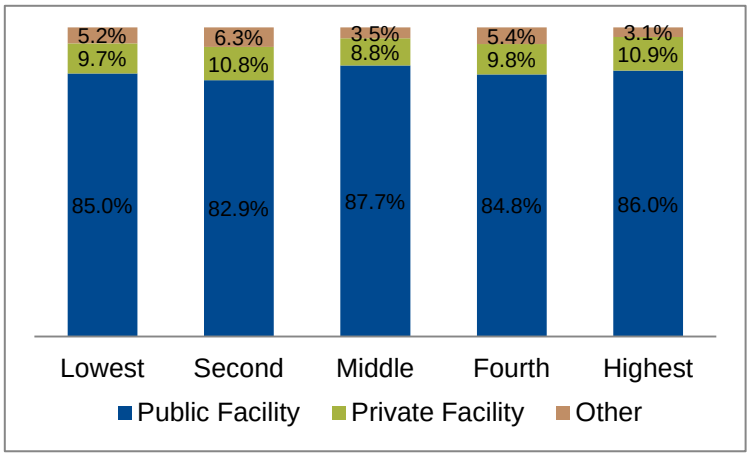
1. HIV and AIDS Services

Figure D-1: Site of Last HIV Test



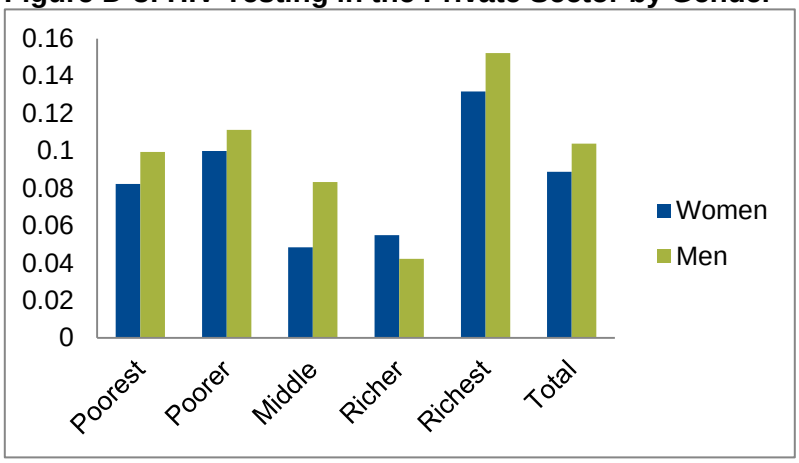
Overwhelmingly, the public sector was the site of the last HIV tests for respondents of the 2005 AIDS Indicator Survey. Private facilities accounted for just 10 percent of the total.

Figure D-2: Site of Last HIV Test by Quintile



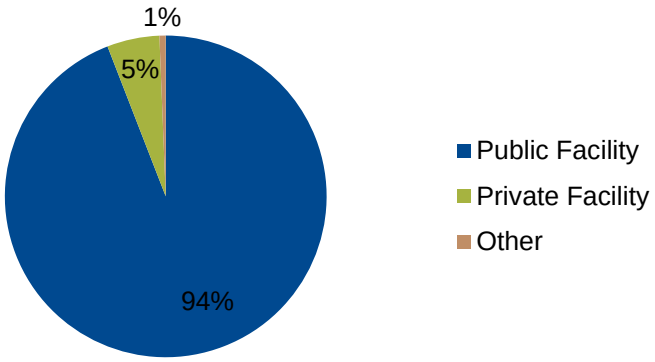
The highest wealth quintile has the highest percentage of respondents that used the private sector for their last HIV test. Further dispelling the myth that the poor only use the public sector, use of the private sector for HIV testing for the lowest two wealth quintiles was almost equal to the upper three wealth quintiles. The middle wealth quintile had the lowest percentage use of the private sector among all quintiles.

Figure D-3: HIV Testing in the Private Sector by Gender



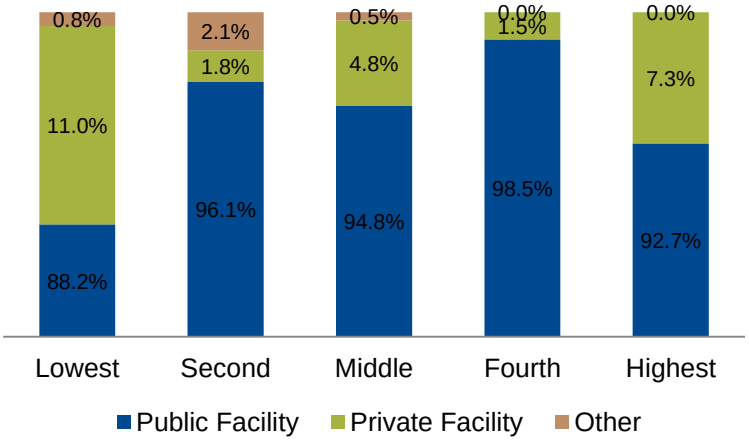
More men than women respondents to the 2005 AIDS Indicator Survey obtained their HIV testing in the private sector, with the exception of the fourth wealth quintile, where more women than men were tested in the private sector.

Figure D-4: Site of PMTCT for Last Pregnancy



The vast majority (94 percent) of women respondents in the 2005 AIDS Indicator Survey used the public sector for PMTCT service delivery during their last pregnancy.

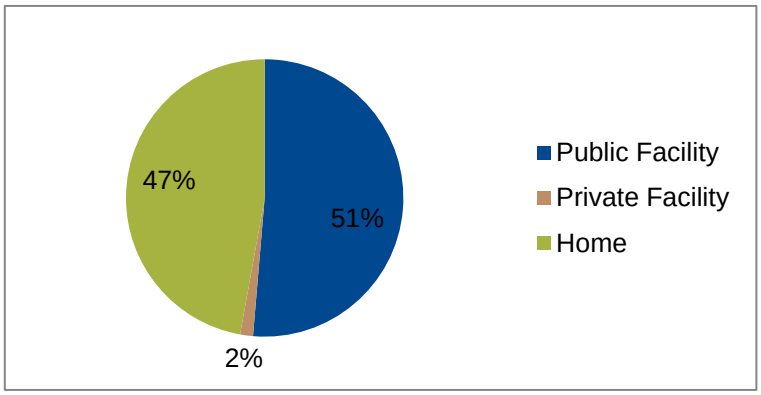
Figure D-5: Site of PMTCT for Last Pregnancy by Wealth Quintile



Women survey respondents in the lowest wealth quintile used a private facility the most (11 percent) for PMTCT during their last pregnancy, followed by women in the highest quintile. Women respondents in the fourth wealth quintile used a private facility the least (less than 2 percent) for PMTCT during their last pregnancy.

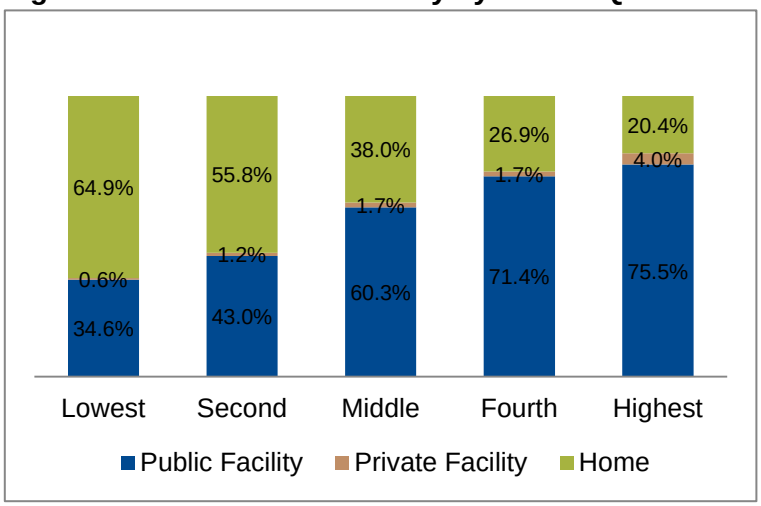
2. Other Health Services

Figure D-6: Site of Last Delivery



Home births accounted for 47 percent of all deliveries by respondents of the survey, with 2 percent using the private sector.

Figure D-7: Site of Last Delivery by Wealth Quintile



Home births dominate in the lower two wealth quintiles, with 65 percent of the lowest quintile and 56 percent of the second quintile delivering at home. The highest wealth quintile had the highest percentage of delivery in the private sector (4 percent).

Figure D-8: STI Treatment in the Private Sector by Gender

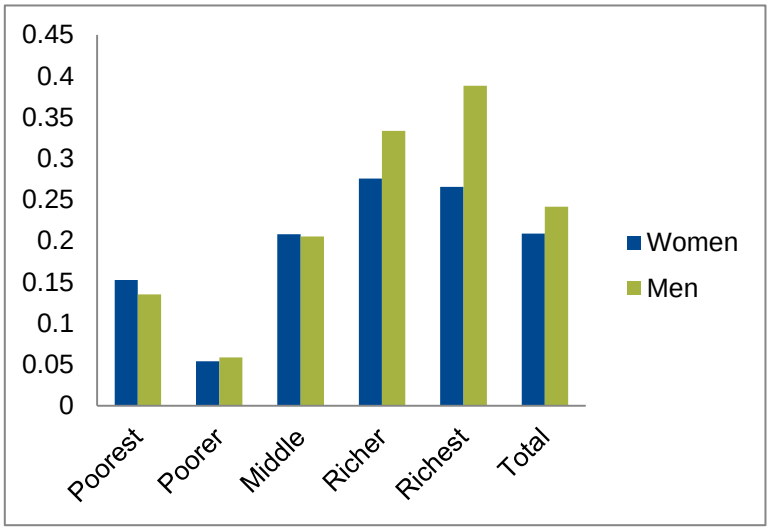


Figure D-8 shows that STI treatment in the private sector by gender is approximately equal for the three poorest wealth quintiles. However, for the two richest wealth quintiles, men seek STI treatment in the private sector more than women.

ANNEX E: BIBLIOGRAPHY

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