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Comprehensive Assessment of Human Resources for Health in Côte d'Ivoire

Executive Summary *August 2005*

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COOPERATION IVOIRO-AMERICAINE
POUR LA LUTTE CONTRE LE VIH/SIDA

This document was produced by PHRplus with funding from the US Agency for International Development (USAID) under Project No. 936-5974.13, Contract No. HRN-C-00-00-00019-00 and is in the public domain. The ideas and opinions in this document are the authors' and do not necessarily reflect those of USAID or its employees. Interested parties may use the report in part or whole, providing they maintain the integrity of the report and do not misrepresent its findings or present the work as their own. This and other HFS, PHR, and PHRplus documents can be viewed and downloaded on the project website, www.PHRplus.org.



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Order No TE 072

Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
CDC	U.S. Centers for Disease Control and Prevention
CDV	<i>Conseil de Dépistage Volontaire</i>
DHR	Department of Human Resources (<i>Direction des Ressources Humaines</i>)
FTE	Full-Time Equivalent
GDP	Gross Domestic Product
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HIV	Human Immunodeficiency Virus
HR	Human Resources
IMF	International Monetary Fund
INFAS	<i>Institut National de Formation des Agents de Santé</i> (National Institute for Health Workers Training)
INFS	<i>Institut National de Formation Sociale</i> (National Institute of Social Training)
MAP	Multi-Country HIV/AIDS Program
MOH	<i>Ministère de la Santé et de la Population</i> (Ministry of Health and Population)
NGO	Non-Governmental Organization
PEPFAR	President's Emergency Plan for AIDS Relief
PHF	Primary Health Facility
PHR_{plus}	Partners for Health Reform _{plus}
PMLS/MAP	<i>Projet Multisectoriel de Lutte contre le Sida</i> /Multisectorial AIDS Project
PMTCT	Prevention of Mother-to-Child Transmission of HIV
PTME	<i>Prévention de la Transmission de la Mère à l'Enfant du VIH</i>
TB	Tuberculosis
UFR	<i>Unités de Formation et de Recherche des Sciences Médicales</i> (Units of Medical Science Research and Training)
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USG	United States Government
VCT	Voluntary (HIV) Counseling and Testing
WHO	World Health Organization

Executive Summary

The shortage of human resources (HR) in the health sector is common in many sub-Saharan African countries (U.S. Agency for International Development [USAID], 2003). The number of trained health care providers has historically been inadequate, but in recent years many countries have suffered from scarcities of almost all cadres of health workers. Production of health workers has not kept pace with needs, especially with the ever-increasing burden of diseases brought about by HIV/AIDS and resurgent epidemics.

Challenges to health sector HR often reflect political, social, and economic problems within countries (World Health Organization [WHO], 2005). Since 2002, the situation surrounding health sector HR in Côte d'Ivoire has reached crisis proportions due to civil war (USAID, 2003). The overall functioning of health services has been severely affected, resulting in the population having only limited access to health care, particularly in conflict zones (Joint United Nations Programs on AIDS, 2004). According to WHO's Health Action in Crisis Report in November 2004, 70 percent of health facilities across the country are not functioning. The majority of medical staff have relocated or fled, or are unable to go to work due to lack of security. Public health programs, including immunization, have been halted, and essential drugs are out of stock in many locations. Furthermore, the health surveillance system across the country is very weak. All those factors contribute to increasing the risk of communicable diseases (WHO, 2004).

Côte d'Ivoire faces three main challenges to expanding HR for health. First, it is very complex to estimate the total number of health workers needed to deliver HIV/AIDS and other basic health services without a comprehensive methodology. Currently, directors of regional health offices identify HR requirements in an empirical way. The Department of Human Resources of the Ministry of Health and Population/*Ministère de la Santé et de la Population* (MOH) consolidates these regional requirements into national ones and transmits them to the Ministry of Civil Service. Even though the country has good ratios of health personnel to the total population compared to other West African countries, data show that the health system requires additional health workers to effectively deliver needed health services. These HR requirements have increased with the expansion of HIV/AIDS programs and the resurgence of other diseases due to the civil conflict.

Second, due to declining socio-economic conditions and structural adjustment measures recommended by the International Monetary Fund (IMF)/World Bank, the Ministry of Civil Service in collaboration with the Ministry of Finance has restricted recruitment of civil servants since 1996. This has resulted in an imbalance between the number of health workers currently employed and the number needed by the MOH, as shown by 2001 and 2004 data. On average, the actual number of health workers hired during this period represents only 40 percent of the expressed need.

Third, the civil service entrance examination, introduced in 1996 to serve as "gate keeper" to the civil service in response to public sector budgetary constraints, impedes absorption of trained health workers into the public health sector. Even though the MOH Department of Human Resources identifies real needs, a considerable number of doctors fail to enter the public sector.

The specific purpose of this report is to quantify the HR now available and that needed by the public health sector to achieve the HIV/AIDS service targets of the government and its partners including the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF), the President's Emergency Plan for AIDS Relief (Emergency Plan, or PEPFAR), the World Bank's Multi-Country HIV/AIDS Program for Africa (MAP), and WHO's 3 by 5 Initiative. The data collected can also be used to examine HR issues pertaining to other priority health services, as well as to the health sector as a whole.

Of the 301 health facilities surveyed, only 5 percent (four National Institutes university hospitals, seven regional and general hospitals, and five health centers) offered antiretroviral treatment (ART) in 2004. During the same period, medical doctors, both general practitioners and specialists treated 1,272 patients in AIDS-related care (ART, voluntary counseling and testing [VCT], prevention of mother-to-child transmission [PMTCT], and opportunistic infections). In the assessment, facilities reporting on ART services stated that each doctor saw on average 13 patients per day. This average was skewed by three facilities that reported that their doctors saw on average respectively 35, 35, and 60 patients per day; if these facilities were removed from the survey sample, the average falls to six patients per doctor per day. Each counselor¹ provided services to approximately 13 VCT patients per day and 21 PMTCT patients per day. It was also reported that on average doctors spend 30 minutes per ART patient per visit. Similarly, counselors¹ spend on average 19 minutes per VCT patient and 18 minutes per PMTCT patient. One general trend in the provision of HIV/AIDS services at these facilities is the rapid increase in the number of health workers delivering AIDS-related care. In 2002, 73 medical doctors, 60 nurses, 88 midwives, and 21 lab technicians were working in AIDS-related care. In 2004, the stock of health workers providing HIV/AIDS-related care more than doubled: 144 medical doctors, 121 nurses, 221 midwives, and 53 lab technicians.

This report makes six main observations. First, it presents current and future HR stock for the health sector. The total HR stock available² in 2004 is estimated at 11,749. Of this total, nurses make up the majority (58 percent) followed by midwives (18 percent) and doctors (14 percent). Applying the 2004 baseline (graduation and attrition rates) and assuming that HR policies stay unchanged, the HR stock is estimated at 10,023 full-time equivalents (FTEs) by 2008. This is a 15 percent reduction in the total stock in 2004 and may affect the delivery of basic health services.

In discussing future projections, it is vital to understand how many health workers actually enter the public sector. Data from 2001 and 2004 indicate that the total number of staff hired in the public sector was estimated to be 40 percent of the total number of graduates in a given year. (Nurses are the exception, with nearly 90 percent of graduates hired into the public sector.) We assume that the remaining graduates enter the private sector, remain unemployed, go abroad, or work elsewhere. We explore two scenarios of how future stock will evolve using the current 40 percent hiring rate into the public sector and an optimistic scenario using a higher rate of 90 percent. Based on the 40 percent hiring rate assumption, the projected stock of medical doctors would decrease to 1,559 in 2008, a 2 percent decrease from the 2004 total. Nurses would also realize a 19 percent decrease from the 2004 total, to 5,568, in 2008. In fact, all staff types would see a decrease in stock with the exception of pharmacists, which would grow to 298 in 2008, a net increase of 49 percent from 2004. Given the low number of new graduates and high attrition rates, the total HR stock projected in 2008 is estimated at 10,023, a 15 percent decrease compared to 2004.

¹ According to PMTCT protocol, doctors, nurses, midwives, psychologists, etc. can be considered counselors.

² Only health providers and social workers were included in the survey. Administrative workers were excluded.

Second, the public health sector has suffered from very high levels of attrition. The year 2002 witnessed a mass exodus of health workers. The public sector lost one-fifth of its medical doctors (general practice and specialists) and one-quarter of its nurses. Clearly, the country faces a dire shortage of nurses. The high rate of attrition and the small annual cohort of nurses entering the public sector are the principal reasons for the shortage of nurses. Strategies to address these shortages should include reducing attrition and/or increasing graduation numbers. For example, if the attrition rate for nurses were reduced by half, the projections of additional nurses in 2008 range from 840 (at a 40 percent hiring rate) to 870 (at a 90 percent hiring rate). Furthermore, if attrition rates were reduced by half and the number of nursing graduates doubled for that period, the projected additional number of FTE nurses would be in the range of 1,314 to 1,936 in 2008. In comparison, the shortfall under the 40 percent projection of the nursing corps would be 2,031 in 2008.

Third, the distribution of health workers has been further skewed towards Abidjan, the capital and largest city in Côte d'Ivoire. The assessment shows that, since the civil conflict began in 2002, the Lagunes region (of which Abidjan is also the capital) had 64 percent of all doctors, 48 percent of all nurses, 74 percent of all pharmacists, 48 percent of all lab technicians, and 67 percent of all social workers. In 2004, those figures rose in all health professions, especially among lab technicians (66 percent in the Lagunes region) and social workers (77 percent). With the violence taking place primarily outside of Abidjan, it is of little surprise that health workers in peripheral areas retreated to the economic center of the country. Abidjan might have become a temporary safe haven, but it is unclear whether these health workers would return to their former provincial posts if the civil conflict ended. In addition to this imbalance between Abidjan and the rest of the country, there are disparities among regions. Savanes, a region in the North, has substantially fewer medical workers in each staff cadre than does the region of Haut-Sassandra in the Southwest, even though both regions have the same population (roughly 1.2 million).

Fourth, the question of whether Côte d'Ivoire can meet the HIV/AIDS targets is a complex one that requires thorough analysis of the situation, including HR policies and strategies. This report only quantifies the number of doctors, nurses, pharmacists, and lab technicians needed to meet the ART and VCT/PMTCT targets under different initiatives. In 2008, Côte d'Ivoire and PEPFAR calls for 77,000 patients to receive ART. To meet the ART and VCT/PMTCT targets in 2005, the total HR needed is about 666 FTE. This number would rise to 1,699 in 2008, with counselors and lab technicians making up the majority of the needed HR stock. It is important to mention that the HIV/AIDS HR requirements are a subset of the total HR in the public health sector and the country must balance the delivery of comprehensive HIV/AIDS activities with other basic health services such as malaria, diarrhea diseases, immunizations, maternal and child health, etc.

Fifth, the nurse shortage in Côte d'Ivoire remains the biggest HR impediment toward meeting the major national and international HIV/AIDS targets. Given this existing shortage, it will be difficult to scale up new services requiring nursing personnel, such as PMTCT, even though the total additional level of effort required appears to be minimal; e.g., only 32-39 additional full-time nurse equivalents needed across the country to prevent 19,241-23,569 infections.

Finally, in terms of the health workforce, in 2008 the country will not be able to maintain basic health services and it will be increasingly challenging to deliver HIV/AIDS services. Using the current 40 percent hiring rate into the public sector, projections show a shortage of health workers across all categories – doctors, nurses, and lab technicians – which will only worsen over time. The shortfall in 2008 is projected to be 331 doctors (or 18 percent of the total needed), 2,005 nurses (27 percent), and 533 lab technicians (54 percent). At the same time that the health system is unable to hire according to the needs, unemployment among doctors, lab technicians, and pharmacists is high.

The following recommendations are made to address the short-and long-term HR shortages:

- ▲ The government in consultation with development partners should examine and agree on options for mobilizing additional health workers to serve in underserved rural areas. Experience from other sub-Saharan African countries shows that, to attract health workers to serve in rural areas, incentives such as school fees for their children, housing allowance, transportation, and in-service training should be provided. Other options being considered or implemented in other countries include hiring of contract workers, retraining and redeploying paramedical or community health workers, and mounting and redoubling serious efforts to recruit and train additional health professionals.
- ▲ The government should develop innovative strategies to motivate the health personnel. Those strategies could include providing regular in-service training under the supervision of a professional; participation in seminars and workshops at the national and even international level; introduction of annual information exchange forums and sharing/diffusion of best practices and experiences between professionals working in HIV/AIDS services delivery; periodic organization of the preventive sessions for “burn out” or exhaustion syndrome among care providers.
- ▲ Côte d’Ivoire is fortunate to have a great number of doctors, pharmacists, and dental surgeons, but unfortunately a high number of these health workers are unemployed. If the country is to meet its national targets for AIDS-related care, the wage bill for the human resources to carry out ART, VCT, and PMTCT must be carefully considered. In 2002, Côte d’Ivoire spent only 1.18 percent of its gross domestic product (GDP) on health, plus 0.41 percent in health sector investment. (In the same year, it disbursed 2.96 percent of its GDP in external debt obligations [IMF, 2004].) Of the total public health budget, salaries usually constitute 40 to 60 percent. It is clear that the current level of health spending cannot sustain the wage bill for the required health personnel to reach national targets. The next stage of planning should price out the wage bill for the increased number of health workers and should involve the Ministry of Finance and the Ministry of Planning. Furthermore, the government should renew discussions with all relevant actors on removing or addressing constraints to employing an adequate number of health personnel needed to meet both national and international health objectives.
- ▲ Côte d’Ivoire needs to take a very close look at the root causes of attrition of nurses. Urgent and aggressive measures should be put in place to reduce their attrition rate. Additionally, the government should consider increasing by about 50 percent the intake of nursing students at the National Institute for Health Worker Training. The shortage of nurses and allied health personnel is the most critical constraint to scaling up PMTCT, which is the most effective means of preventing new infections. In addition, increasing the number of nurses trained and retained appears to be among the most cost-effective of possible interventions.
- ▲ Urgent and concerted solutions between the government and partners in general, and stakeholders in particular, must be found to solve the problem of unemployment among doctors, lab technicians, and pharmacists. Experience from other sub-Saharan African countries (e.g., Uganda) has shown that countries are hiring and paying additional personnel to work specifically on GF, PEPFAR, and MAP programs, using resources from these organizations.

- ▲ Currently it may be impossible for Côte d’Ivoire to absorb the total number of unemployed health professionals in the corps of doctors, pharmacists, and dental surgeons. However, this “surplus” should serve as a net advantage to the country – Côte d’Ivoire might want to consider exploring formal mechanisms of sending unemployed health workers to other sub-Saharan countries. This exportation of qualified health professionals could be done through the channel of bilateral cooperation, or within the framework of free labor market, and therefore could contribute financially to the reconstitution of the initial stock or to help run the tertiary institutions.
- ▲ The MOH should put in place a strong coordinating mechanism of different stakeholders delivering HIV/AIDS services. This could have a considerable impact on the provision of comprehensive and efficient ART, VCT, and PMTCT services.
- ▲ The government must take stock of HR available in the private sector. In order to fully understand HR needs for basic health care and specifically HIV/AIDS care, assessments of HR in the for-profit and non-profit private sector are essential.