



## UNIT COST OF PROVIDING HIV SERVICES TO KEY POPULATIONS IN GHANA AND CÔTE D'IVOIRE

*Brief*

The response to HIV and AIDS is an integral component of efforts to improve social and economic conditions in Ghana and Côte d'Ivoire. Available data suggest that HIV prevalence rates among key populations, particularly female sex workers (FSWs) and men who have sex with men (MSM), are several times higher than the national averages for both countries. These groups also face additional barriers to social acceptance and access to services, compared with the general population. Accordingly, Ghana and Côte d'Ivoire each completed a Strategic Framework to guide interventions and service delivery specifically for key populations. The frameworks propose a package of services that includes HIV prevention; HIV treatment, care, and support; and psychosocial support and legal services (see Table 1).

Given the importance of key population programs in each country's national HIV response, several HIV stakeholders expressed the need for country-specific costing data on key populations to provide an evidence base for policy-making processes. A study team was formed in each country, variously comprising government representatives, the U.S. Agency for

International Development (USAID), the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the USAID- and PEPFAR-funded Health Policy Project, the Ghana AIDS Commission, Ghana's National Technical Working Group on Most-at-risk Populations, Côte d'Ivoire's National Programme Response to AIDS Among Highly Vulnerable Populations, and the Côte d'Ivoire National Technical Working Group for Key Populations. The study teams identified the following questions:

- What is the cost of providing one key HIV service one time (service contact) to an FSW or man who has sex with men?
- What is the current average cost of delivering one key HIV service one time to an FSW or man who has sex with men, based on the proportion of services currently being used (average contact)?
- What is the cost of reaching one FSW and one man who has sex with men for one year with a comprehensive package of services?
- What are the variations or cost components driving these costs?

- What would be the cost implications of changes in service utilization, both in terms of types of services used and the frequency accessed?
- How will the quality of service provision affect unit cost?

The study teams designed mixed methods studies, consisting of primary and secondary data collection and analysis, to estimate the average national financial cost to the provider for delivering a comprehensive package of services to one FSW and one man who has sex with men for one year in varying scenarios of service use and intensity. The teams examined the costs of service delivery staff time (program managers, paid personnel, and administrative staff); supplies (prevention commodities, IEC [information, education, and communication] materials, and other supplies); and capital costs such as equipment. The approach considered a representative service delivery model for the intervention.

Purposive samples of 8 intervention sites operated by nongovernmental organizations (NGOs) in Ghana, and 26 in Côte d'Ivoire, were selected to reflect regional and operational variation within the countries. A standard questionnaire was developed to collect data from the sample of intervention sites. The questionnaire was pre-tested at one site in Ghana and then used to train data collection teams, and a pilot study was carried out at four sites in Côte d'Ivoire. Data collectors interviewed local program officials, administered the questionnaire, and reviewed program and NGO documents at each intervention site. Also at each site, data were collected on the time program officials spent with each client and on the various stages of the intervention. Respondents provided information on management functions, including time allocation and resources used. Throughout the data collection period, local consultants gathered information from central sources on resource use and prices, as well as a variety of local sources.

Inputs were first analyzed according to type of cost and categorized as follows: labor (NGO personnel and administrative staff); supplies (prevention commodities and other consumables); and capital costs, such as equipment. To adjust for inflation, all costs reflect constant 2010 prices. Based on unit cost estimates for each service, the study teams conducted scenario

analyses to estimate program reach under varying program conditions.

The studies yielded findings on the national average unit cost for one-time delivery of each service included in the comprehensive service package, to one FSW and one man who has sex with men (unit cost per service contact). The most direct indicator of national cost was an average cost for reaching one client with one service one time across the intervention sites included in the study, weighted by the number of clients served at each site. In Ghana, application of the weighted average yielded costs ranging from GHC 2.56 for a support service to GHC 38.95 for HIV testing and counseling services in a drop-in center setting for FSW service contacts; and GHC 2.56 for a support service to GHC 47.85 for mobile voluntary counseling and testing (VCT) services for MSM service contacts. Indirect costs (e.g., program management) were the most important cost category, accounting for between 40 and 63 percent of costs.

The teams conducted sensitivity analyses on unit cost estimates to determine how changes in service delivery over time could affect costs. In Ghana, the unit cost per service contact is estimated to decline by 31–45 percent for FSW interventions and by 26–37 percent for MSM interventions, in scenarios where service delivery doubles in the next year. Unit costs per service contact were weighted based on current utilization of services, estimated at GHC 24.04 for FSW services and GHC 30.99 for MSM services. To project weighted unit costs for reaching a FSW or man who has sex with men for one year with a package of services, the study team developed scenarios based on varying service delivery mechanisms and service utilization projections.

The study in Ghana produced the country's first cost estimates for delivering key HIV services to FSWs and MSM. The most important results were the identification of (1) major cost drivers for HIV services included in Ghana's national key populations HIV program—namely the high indirect costs compared to direct costs (e.g., condoms and lubricants)—and (2) substantial differences in unit cost projections as the program is brought to scale. The biggest cost driver was the program's scale. Projections of unit costs in varying service delivery scale-up scenarios indicated that unit costs per service could, in some cases, drop by nearly

**Table 1. Components of Comprehensive Package of Services for FSWs and MSM**
**Female sex worker comprehensive package of services**

PREVENTION	TREATMENT, CARE, AND SUPPORT	PSYCHOSOCIAL SUPPORT
<ul style="list-style-type: none"> <li>▪ Condoms and lubricants</li> <li>▪ HIV testing and counseling</li> <li>▪ STI screening and treatment</li> <li>▪ Targeted behavior change communication</li> <li>▪ Sexual and reproductive health, including prevention of mother-to-child transmission</li> <li>▪ Post-exposure prophylaxis in cases of rape and sexual assault</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prevention, diagnosis, and treatment of opportunistic infections/tuberculosis</li> <li>▪ STI treatment</li> <li>▪ Antiretroviral therapy</li> <li>▪ Palliative care, including symptom management</li> <li>▪ Home-based care</li> <li>▪ Nutrition support</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mental health diagnosis, counseling, and treatment</li> <li>▪ Legal advice and support</li> <li>▪ Income generation and alternative livelihood access</li> <li>▪ Child care and support</li> <li>▪ Personal development and empowerment</li> <li>▪ Establishment of peer support groups and networks</li> <li>▪ Training and involvement of non-paying partners</li> </ul>
<b>If required:</b>		
<ul style="list-style-type: none"> <li>▪ Harm reduction services</li> <li>▪ Overdose management</li> <li>▪ Drug detoxification</li> <li>▪ Drug dependence treatment</li> </ul>		
<b>Cross Cutting Elements</b>		
<ul style="list-style-type: none"> <li>▪ MARP friendly drop-in centers and clinics</li> <li>▪ Case management</li> <li>▪ Peer education</li> </ul>		<ul style="list-style-type: none"> <li>▪ Life skills training</li> <li>▪ Referrals to services</li> <li>▪ Risk assessment and reduction</li> </ul>

**Men who have sex with men comprehensive package of services**

PREVENTION	TREATMENT, CARE, AND SUPPORT	PSYCHOSOCIAL SUPPORT
<ul style="list-style-type: none"> <li>▪ Condoms and lubricants</li> <li>▪ HIV testing and counseling</li> <li>▪ STI screening and treatment</li> <li>▪ Targeted behavior change communication</li> <li>▪ Male sexual health</li> <li>▪ Post-exposure prophylaxis in cases of rape and sexual assault</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prevention, diagnosis, and treatment of opportunistic infections/tuberculosis</li> <li>▪ Vaccination, diagnosis, and treatment of viral hepatitis</li> <li>▪ Antiretroviral therapy</li> <li>▪ STI treatment</li> <li>▪ Palliative care including symptom management</li> <li>▪ Home-based care</li> <li>▪ Nutrition</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mental health diagnosis, counseling, and treatment</li> <li>▪ Legal advice and support</li> <li>▪ Income generation and employment</li> <li>▪ Personal development and empowerment</li> <li>▪ Establishment of peer support groups and networks</li> </ul>
<b>If required:</b>		
<ul style="list-style-type: none"> <li>▪ Harm reduction services</li> <li>▪ Overdose management</li> <li>▪ Drug detoxification</li> <li>▪ Drug dependence treatment</li> </ul>		
<b>Cross-cutting elements</b>		
<ul style="list-style-type: none"> <li>▪ MARP friendly drop-in centers and clinics</li> <li>▪ Case management</li> <li>▪ Peer education</li> </ul>		<ul style="list-style-type: none"> <li>▪ Life skills training</li> <li>▪ Service referrals</li> <li>▪ Risk assessment and reduction</li> </ul>

50 percent if intervention sites doubled the number of services provided in one year.

In Côte d'Ivoire, application of the weighted average yielded costs ranging from FCFA 4,856 for a support service to FCFA 8,697 for mobile VCT services. For clients living with HIV, the weighted unit costs per service contact ranged from FCFA 5,015 for psychosocial support contact to FCFA 25,413 for the biological assessment visit (pre-antiretroviral therapy). Here too, indirect costs were the most important category, accounting for approximately 85 percent of the total.

The unit cost per service contact in Côte d'Ivoire was estimated to decline by 36–50 percent in scenarios where service delivery doubles in the next year. Unit costs per service contact were weighted based on current utilization of services, estimated at FCFA 8,893. As in Ghana, weighted unit costs for reaching one SW or man who has sex with men with a package of services in Côte d'Ivoire were derived from scenarios based on varying service delivery mechanisms and service utilization projections.

Other important findings from these studies include the importance of adequately budgeting health and prevention commodities when estimating unit costs, and the identification of measures to strengthen monitoring and evaluation systems necessary for national MARP programs to effectively monitor and evaluate the cost and cost-effectiveness of program elements.

In general, the governments of Ghana and Côte d'Ivoire should examine these results when updating the costing of their national strategic plans on HIV and AIDS, their Strategic Frameworks, and their Operational Plans for key populations; and when budgeting future project proposals to the Global Fund and other potential donors. Specifically, these national governments should develop national operational definitions of program reach. For the most meaningful use of these results, program planners must decide on the target mix of service utilization and contacts per year and carefully

monitor service delivery to ascertain accurate unit costs by program reach over time.

Finally, once operational definitions are established, national data collection and reporting tools, as well as national databases and other data storage architecture, should be updated to reflect these changes and accurately collect the right data on the service package. Intervention sites will require significant capacity-building support to accurately collect high-quality data on these service packages. The governments of Ghana and Côte d'Ivoire, their technical partners, and donors should prioritize monitoring and evaluation interventions for vulnerable populations. Capacity-building support could include direct training on new tools, support on data use for local decision making, and strategies to improve data quality.

## To access the full reports

*Estimation du coût unitaire du paquet minimum de services liés au VIH pour les PS et les HSH en Côte d'Ivoire.* Health Policy Project, Futures Group, 2013.

<http://www.healthpolicyproject.com/index.cfm?id=publications&get=pubID&pubID=155>

*Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex With Males.* Health Policy Project, Futures Group, 2012.

[http://www.healthpolicyproject.com/pubs/63\\_GhanaMARPsUnitCostFINAL.pdf](http://www.healthpolicyproject.com/pubs/63_GhanaMARPsUnitCostFINAL.pdf)

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