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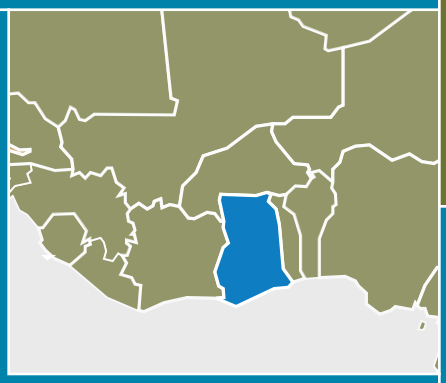
ESTIMATING THE UNIT COSTS OF PROVIDING KEY HIV SERVICES TO FEMALE SEX WORKERS AND MALES WHO HAVE SEX WITH MALES IN GHANA



A Data Use Guide

This publication was prepared by Andrew Koleros and Katie West Slevin of the Health Policy Project.

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ABBREVIATIONS

AIDS	acquired immune deficiency syndrome
BCC	behaviour change communication
DIC	drop-in centre
FSW	female sex worker
GAC	Ghana AIDS Commission
GHc	Ghana *cedi* (currency)
HIV	human immunodeficiency virus
HTC	HIV testing and counselling
IEC	information, education, and communication
M&E	monitoring and evaluation
MARP	most-at-risk population
MSM	males who have sex with males, *or* men who have sex with men
OI	opportunistic infection
PMTCT	prevention of mother-to-child transmission
STI	sexually transmitted infection
TB	tuberculosis
TWG	Technical Working Group
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	U.S. Agency for International Development
USD	United States dollar
VCT	voluntary counselling and testing
WAPCAS	West Africa Program to Combat AIDS and STIs
WHO	World Health Organisation

INTRODUCTION: A DATA USE GUIDE

To respond to the HIV epidemic, the government of Ghana has gradually scaled up effective HIV interventions based on locally generated data. To produce good estimates and projections to use for cost-effective and effective planning, it is critical to have accurate information about the costs involved in providing services to specific populations as well as to the general public.

Available data suggest that in Ghana, HIV prevalence among most-at-risk populations (MARPs), particularly female sex workers (FSWs) and males who have sex with males (MSM), are several times higher than the national average. These groups are also socially marginalized and face considerable barriers to service access. Aware of the special vulnerability of MARPs, Ghana completed a MARP Strategic Framework 2011–2015 to guide interventions and service delivery for these groups. The framework proposes a package of services that includes HIV prevention; HIV treatment, care, and support; and psychosocial support and legal services.

To support the evidence base for Ghana's national HIV programme for MARPs, in 2011 the Ghana AIDS Commission (GAC) and the National Technical Working Group on Most-at-Risk Populations collaborated with the U.S. Agency for International Development (USAID) and the Health Policy Project (HPP) on a joint study to estimate the unit costs of delivering comprehensive HIV services to MARPs in Ghana. That study—*Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex with Males* (Koleros, 2012)—represents the first cost estimates for delivering key HIV services to FSWs and MSM in Ghana.

The study examined the following key questions:

- What is the cost of providing one key HIV service one time (service contact) to individual FSWs or MSM?
- What is the current average cost of delivering one key HIV service one time to individual FSWs or MSM based on the proportion of services currently being used (average contact)?
- What is the cost of reaching one FSW and one MSM 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 the types of services used and how often they are accessed?

The study focused primarily on the comprehensive package of services outlined in Ghana's MARP Strategic Framework 2011–2015. It analysed unit cost (defined as the cost of delivering each of the services included in the comprehensive service package one time to one FSW or one MSM), as well as the major drivers of costs within the national MARPs HIV programme and the differences in unit cost projections as the programme is brought to scale.

The study team also outlined three potential scenarios of service packages for MARPs. These scenarios considered (1) changes in service delivery scale-up over time, (2) changes in the proportions of services being used, and (3) changes in the number of contacts per year for each service. One of these three scenarios (Scenario 2 from the main study) is presented in this *Data Use Guide* to illustrate what a standard service package might look like and to demonstrate how programme planners can use the study data to project annual and national MARP HIV programme costs. This scenario was also adopted for the GAC MARP Operational Plan Framework 2011–2013.

Purpose of This Guide

This *Data Use Guide* accompanies the final report of the *Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex with Males* study (Koleros, 2012), which provides useful information for national programme planners, donors, and other stakeholders on the costs of targeted services for FSWs and MSM. However, it does not include specific operational details on how these different stakeholders can use the study results for their individual planning and budgeting. This *Data Use Guide* summarizes the key findings from the original study and provides details on how the study results can best be used to inform the evidence base for targeted MARP services and Ghana's national MARP HIV programme.

COSTS FOR MOST AT-RISK POPULATIONS HIV PROGRAMME

The most representative indicator of costs for MARPs programming is the average cost of delivering services to one client for one year, based on which services will be provided and how often they will be delivered to each client. To calculate this figure, programme planners need to decide (1) what combination of services they will provide and (2) the extent of their programme reach (i.e., how many times they will likely make contact with each client).

To further estimate national costs, programme planners will need to project size estimates for their target populations—in this case FSWs and MSM—and define their programme target (i.e., what percentage of the target population they will attempt to reach). Each of these steps is outlined below, with a costing worksheet provided in Annex A to help programme planners work step by step through this easy-to-follow costing exercise.

USING STUDY RESULTS FOR NATIONAL PLANNING AND BUDGETING

This section focuses on estimating the total annual cost of HIV services for FSWs and for MSM, and on estimating MARPs programme costs for national HIV and AIDS strategic and MARP operational plans.

Estimating the Total Annual Cost of HIV Services Targeting FSWs

To project annual and national costs for HIV services targeting FSWs, programme planners need to first define their standard service package and programme reach—that is, the mix of services they will offer to one FSW and at what intensity over the course of one year.

Using study results to determine a standard service package

While they share certain traits, FSWs are not homogeneous. Therefore, targeted service packages that combine biomedical, behavioural, and structural interventions should be designed for each population based on the local context and culture as well as the characteristics and epidemiology of the population (Beyrer et al., 2012).

There are a number of resources available to help programme planners determine the best service package possible. The World Health Organisation (WHO) recently published guidelines in the report, *Prevention and Treatment of HIV and Other Sexually Transmitted Infections Among Men Who Have Sex With Men and Transgender People*, and Ghana's MARP Operational Plan Framework 2011–2013 outlines a minimum package of services for MSM (see annexes B and C). While these resources can help guide programme planners, the most appropriate package of services for FSWs will ultimately depend on the local context in which the services are provided. Table 1 displays a menu of typical MARP services, as outlined by Ghana's MARP Strategic Framework 2011–2015. Programme planners can use this menu to determine which services will best fit their client population and to select a tailored service package.

Table 1. Types of Services

Outreach Contact	A one-to-one or small group meeting with a peer educator or outreach worker in a community setting, where information, education, and communication (IEC) materials and prevention commodities such as condoms and lubricants are distributed.
Edutainment Event	An event in a community setting led by outreach workers that includes safe sex education components, where IEC materials and prevention commodities such as condoms and lubricants are distributed, and an entertainment component, such as a dance, a film, or other social gathering takes place.
Community Mobile Voluntary Counselling and Testing (VCT)	An outreach service provided in a community setting, including an educational component with the provision of IEC materials and prevention commodities such as condoms and lubricants, as well as a voluntary HIV testing and counselling (HTC) component.
DIC: Counselling Visit*	A regular visit to a drop-in centre (DIC), including the provision of IEC materials and such prevention commodities as condoms and lubricants, peer education sessions, counselling, and/or case management and referrals.
DIC: STI Screening*	A contact within a centre offering general DIC counselling services as well as screening and referral services for sexually transmitted infections (STIs).
DIC: HTC Services*	A contact within a centre offering general DIC counselling services as well as HTC services.

* DIC services may be provided by staff from nongovernmental organisations, healthcare workers, or peer educators in a drop-in centre setting.

To demonstrate how to project annual and national costs for Ghana's FSW-targeted HIV programme, Table 2 outlines one example of a service package for FSWs. This package represents one of the three scenarios (Scenario 2) outlined in the main study report, which is the one costed in the national MARP Operational Plan Framework 2011–2013. The package projects an equal distribution of outreach contacts and specialised drop-in centre (DIC) visits, with half of all DIC contacts accessing STI or HTC services.

Using study results to determine programme reach

Once a standard service package has been determined, programme planners will then need to define their programme reach (i.e., number of service contacts, or how many times they will likely make contact with each client). At this point it is important to distinguish between individuals reached and service contacts. Each FSW will likely receive many services and make contact with the programme several times throughout a year.

For this reason, programme planners will need to determine a reasonable number of service contacts for each service offered (i.e., how many times that service will likely be offered and used by one FSW in the course of a year). Ideally, to determine an effective programme reach, programme planners would have access to robust monitoring and evaluation (M&E) systems that collect these data and link programme exposure and intensity to health outcomes. If these M&E systems are not present, programme planners will need to rely on available information and experience from past intervention efforts and more generalized guidance.

As part of the costing study, the study team analysed various scenarios (including Scenario 2, the example service package) using 4, 6, 10, and 12 contacts per year for each service. To demonstrate how to project annual and national costs for Ghana's FSW-targeted HIV programme, an operational definition of 12 contacts per year for programme reach will be used. Table 2 illustrates the distribution of services as a

percentage of total services, as well as the corresponding number of service contacts per service based on the example standard service package (Scenario 2 from the main study).

Table 2. Example of Standard Service Package and Programme Reach for FSWs

	Services	Distribution of Services Based on Current Use (%)	Corresponding Number of Service Contacts
Scenario 2: Equal distribution of outreach contacts and specialised DIC visits	Outreach contact	47%	5.69 contacts
	Edutainment event	1%	0.14 contacts
	Community mobile VCT	1%	0.17 contacts
	Total outreach		6 contacts
	DIC: Counselling visit	25%	3 contacts
	DIC: STI screening	13%	1.5 contacts
	DIC: HTC services	13%	1.5 contacts
	Total DIC contacts		6 contacts
	Total	**100%**	**12 contacts**

Using study results to project annual costs

Once the standard service package and programme reach are defined, planners can then calculate the unit cost of providing a service package to one client for one year using the equation below and the unit costs per service contact outlined in Table 3. This will allow programme planners to project annual costs for one client.

Average costs for reaching 1 client for 1 year = (cost per service contact 1 * number of contacts per year) + (cost per service contact 2 * number of contacts per year) + (cost per service contact 3 * number of contacts per year) + (cost per service contact 4 * number of contacts per year)...

Table 3. FSW Unit Cost per Service Contact

Outreach		Drop-in Centre	
Service	**Unit Cost: GHc (USD)**	**Service**	**Unit Cost: GHc (USD)**
Outreach contact	21.97 ($14.91)	DIC: counselling visit	25.93 ($17.59)
Edutainment event	21.97 ($14.91)	DIC: STI screening	25.72 ($17.45)
Community mobile VCT	34.92 ($23.69)	DIC: HTC services	32.43 ($22.00)
Seropositive	41.17 ($27.93)	*Seropositive*	38.95 ($26.43)
Seronegative	34.22 ($23.22)	*Seronegative*	31.70 ($21.51)
Support services			
Hotline + M-Friends/M-Watchers Programme		2.56 ($1.74)	

The illustrative service package outlined in Table 2 and the unit costs provided in Table 3 lead to the following equation:

- Average costs for reaching 1 client for 1 year = (21.97 * 5.69) + (21.97 * 0.14) + (34.92 * 0.17) + (25.93 * 3) + (25.72 * 1.5) + (32.43 * 1.5) = 299.04 GHc

Readers may note that the total cost for providing the package of services outlined in Table 2 at 12 contacts per year does not correspond to the total cost given in the main study report for providing Scenario 2 for 12 contacts per year. This is because the study team used weighted costs for projecting annual and national costs of the various scenarios that were examined. By doing this, the study team arrived at an overall proportional cost per service for each of the scenarios based on the empirical data collected during the research study.

While this is an effective method of projecting costs based on actual service utilization data, such data are often not available, nor are they necessary to project overall costs more generally. Programme planners should therefore simply use the unit costs per service contact provided in Table 3 to complete their costing work.

Using study results to project national annual costs

To project national costs, programme planners will need to obtain accurate size estimates of the service population—in this case, FSWs. However, obtaining accurate size estimates of MARPs can be incredibly challenging. At-risk populations such as FSWs and MSM are highly stigmatized and often face hostile social, political, and legal environments that discourage them from self-identifying (Beyrer et al., 2012; Muraguri, Temmerman, and Geibel, 2012). The hidden nature of these groups serves to make population estimates difficult and has led to data gaps about the prevalence of sex work as well as gaps in our understanding of same-sex sexual behaviour.

There are currently no accurate size estimates for FSWs in Ghana, pointing to the need for more extensive and systematic data on the size of sex worker populations (GAC, 2011). That said, varied estimates have been reported, the most recent from a 2009 UNAIDS modes of transmission study that estimated the FSW population at 34,990 (Bosu et al., 2012), the figure used here to complete national annual cost projections. (For guidance on how to obtain the most accurate size estimates, see Annex B.) In addition, future GAC integrated bio-behavioural sentinel surveys or other efforts to estimate the size of MARPs will likely provide more accurate projections, and programme planners should continually strive to locate the most recent size estimates possible before costing their programmes.

Once programme planners have obtained an estimate of their overall population size (e.g., 34,990 FSWs nationally), they will then need to determine their programme target, which is the percentage of the total population in need of services they will aim to reach. From there, multiply the total FSW population in need of services by the programme target percentage to determine the total number of FSWs the programme will aim to reach per year.

Programme target per year = Total population in need of services * percentage of the population the programme will aim to reach in one year

To illustrate, if there are an estimated 34,990 FSWs throughout the country and the aim is to reach 80 percent of them in the course of a year, the overall programme target is 27,992.

- Programme target per year = 34,990 * 0.80 = 27,992

Now that the programme target per year has been determined and the standard service package and programme reach have been defined (see section below entitled *Using study results to determine a standard service package*), it's possible to project the national annual costs of providing services to FSWs by multiplying the annual costs (i.e., average cost for reaching one client for one year) by the target population size.

National costs for providing HIV services to FSWs =
Average cost for reaching one client for one year * population size

Using the example leads to:

- National costs for providing HIV services to FSWs = 299.04 * 27,992 = 8,370,727.68 Ghanaian *cedi* (GHc)

Estimating the Total Annual Cost of HIV Services Targeting MSM

To project annual and national costs for HIV services targeting MSM, follow the same steps for estimating costs for FSWs outlined in the previous section. Programme planners will need to first define their standard service package and programme reach, that is, the mix of services they will offer to one MSM and at what intensity over the course of one year.

Using study results to determine a standard service package

As is the case for FSWs, MSM are not a homogenous group. Targeted service packages that combine biomedical, behavioural, and structural interventions should be designed for each population based on the local context and culture as well as the characteristics and epidemiology of the population (Beyrer et al., 2012).

There are, however, a number of resources available to aid programme planners in determining the best service package possible. WHO recently published guidelines in the report, *Prevention and Treatment of HIV and Other Sexually Transmitted Infections Among Men Who Have Sex With Men and Transgender People*, and Ghana's MARP Operational Plan Framework 2011–2013 outlines a minimum package of services for MSM (see annexes B and C). While these resources can help guide programme planners, ultimately the most appropriate package of services for MSM will depend on the local context in which the services will be provided. Table 1 shows a menu of typical MARP services, as outlined by Ghana's MARP Strategic Framework 2011–2015. Programme planners are encouraged to use this menu of services to determine which services best fit their client population and to design a tailored service package.

However, to demonstrate how to project annual and national costs for Ghana's MSM-targeted HIV programme, Table 4 provides the example of a service package for MSM. This package represents one of the three scenarios (Scenario 2) outlined in the main study report and the one costed in the national MARP Operational Plan 2011–2013. The package projects an equal distribution of outreach contacts and specialised DIC visits, with half of all DIC contacts accessing STI or HTC services.

Table 4. Example of Standard Service Package and Programme Reach for MSM

	Services	Distribution of Services Based on Current Use (%)*	Corresponding Number of Service Contacts
Scenario 2: Equal distribution of outreach contacts and specialised DIC visits	Outreach contact	43%	5 contacts
	Community mobile VCT	7%	1 contact
	Total outreach contacts		6 contacts
	DIC: counselling visit	25%	3 contacts
	DIC: STI screening	12.5%	1.5 contacts
	DIC: HTC services	12.5%	1.5 contacts
	Total DIC contacts		6 contacts
	Total	100%	12 contacts

*Numbers rounded.

Using study results to determine programme reach

Once a standard service package has been determined, programme planners will then need to define their programme reach (i.e., number of service contacts or how many times they will likely make contact with each client). At this point it is important to distinguish between individuals reached and service contacts. Each MSM will likely receive many services and make contact with the programme several times throughout the course of a year. For this reason, programme planners will need to determine a reasonable number of service contacts for each service offered (i.e., how many times that service will likely be offered and used by one MSM in the course of a year). To determine an effective programme reach, programme planners would ideally have access to robust M&E systems that collect these data and link programme exposure and intensity to health outcomes. If these M&E systems are not present, programme planners will need to rely on available information and experience from past intervention efforts and more generalized guidance.

As part of the costing study, the study team analysed various scenarios (including Scenario 2, the example service package) using 4, 6, 10, and 12 contacts per year for each service. To demonstrate how to project annual and national costs for Ghana's MSM-targeted HIV programme, an operational definition of 12 contacts per year will be used for programme reach. Table 4 illustrates the distribution of services (as a percentage of total services) and the corresponding number of service contacts per service, based on the example standard service package (Scenario 2 from the main study).

Using study results to project annual costs

Once the standard service package and programme reach are defined, planners can then calculate the unit cost of providing a service package to one client for one year using the following equation and the unit costs per service contact outlined in Table 5. This will allow programme planners to project annual costs for one client.

Average costs for reaching 1 client for 1 year = (Cost per service contact 1 * number of contacts per year) + (cost per service contact 2 * number of contacts per year) + (cost per service contact 3 * number of contacts per year) + (cost per service contact 4 * number of contacts per year)

Table 5. MSM Unit Cost per Service Contact

Outreach		Drop-in centre	
Service	**Unit Cost: GHc (USD)**	**Service**	**Unit Cost: GHc (USD)**
Outreach contact	29.97 ($20.34)	DIC: counselling visit	25.93 ($17.59)
Community mobile VCT	42.19 ($28.63)	DIC: STI screening	25.34 ($17.19)
Seropositive	47.85 ($32.47)	DIC: HTC services	30.96 ($21.01)
Seronegative	41.56 ($28.20)	*Seropositive*	37.92 ($25.73)
		Seronegative	30.19 ($20.48)
Support Services			
Hotline + M-Friends/M-Watchers Programme		2.56 ($1.74)	

Taking the illustrative service package outlined in Table 4 and the unit costs provided in Table 5, the following equation emerges:

- Average costs for reaching 1 client for 1 year = (29.97 * 5) + (42.19 * 1) + (25.93 * 3) + (25.34 * 1.5) + (30.96 * 1.5) = 354.28 GHc

Readers may note that the total cost for providing the package of services outlined in Table 4 at 12 contacts per year does not correspond to the total cost given in the main study report for providing Scenario 2 for 12 contacts per year. This is because the study team used weighted costs for projecting annual and national costs of the various scenarios they examined. By doing this, the team arrived at an overall proportional cost per service for each of the scenarios based on the empirical data collected during the research study. While this is an effective method to project costs based on actual service utilization data, these data are often not available, nor are they necessary to project overall costs more generally. Thus programme planners are encouraged to simply use the unit costs per service contact provided in Table 5 to complete their costing work.

Using study results to project national annual costs

To project national costs, programme planners will need to obtain accurate size estimates of the service population, which can be a significant challenge for MSM. At-risk populations like FSWs and MSM are highly stigmatized and often face hostile social, political, and legal environments that discourage them from self-identifying (Beyrer et al., 2012; Muraguri, Temmerman, and Geibel, 2012). In fact, as of 2012, 93 countries had no available reports on MSM in the previous five years (Beyrer et al., 2012). The hidden nature of these groups makes population estimates difficult and has led to data gaps about the prevalence of sex work and gaps in our understanding of sex work and same-sex sexual behaviour.

The most recent reliable estimate of Ghana's MSM population comes from modeling done as part of a 2009 UNAIDS modes of transmission study, which estimates the size of the population at 13,458 (Bosu et al., 2012). For further guidance on how to obtain the most accurate size estimates, Annex B includes a number of resources. In addition, future GAC integrated bio-behavioural sentinel surveys or other efforts to estimate the size of MARPs will likely provide more accurate projections, and programme planners should continuously strive to locate the most recent size estimates possible before costing their programmes.

Once programme planners have obtained an estimate of their overall population size (e.g., 13,458 MSM nationally), they will then need to determine their programme target—in other words, the percentage of the total MSM population in need of services they will aim to reach. From there, multiply the total

population in need of services by the programme target percentage to determine the total number of MSM the programme will aim to reach per year.

> Programme target per year = Total population in need of services * percentage of the population the programme will aim to reach in 1 year

To illustrate this, if there are an estimated 13,458 MSM throughout the country and the aim is to reach 80 percent of them in the course of a year, the overall programme target is 10,766.

- Programme target per year = 13,458 * 0.80 = 10,766

Now that the programme target per year has been determined and the standard service package and programme reach have been defined (see section entitled *Using study results to determine a standard service package*), it is possible to project the national annual costs of providing services to MSM. To do this, multiply annual costs (i.e., average cost for reaching one client for one year) by target population size.

> National costs for providing HIV services to MSM =
> Average cost for reaching 1 client for 1 year * population size

Using this example leads to the following:

- National costs for providing HIV services to MSM = 354.28 * 10,766 = 3,814,178.48 GHc

Estimating MARPs Programme Costs for National HIV and AIDS Strategic and MARP Operational Plans

The costing data provided by the *Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex with Males* study also prove to be useful for national planning exercises. Once the TWG on Most-at-Risk Populations and other relevant government entities have (1) defined a standard service package, (2) developed an operational definition of programme reach, and (3) conducted relevant population size estimates, it will be able to use the data to update the costing for future versions of the National HIV and AIDS Strategic Plan, the MARP Strategic Framework, and the MARP Operational Plan.

However, when conducting such an update, programme planners should avoid double costing when scaling up cost projections to a national level. To do this, planners need to separate costs that are specific to the MARP programme from those that are generally subsumed into the overall cost of running the health sector and are centrally budgeted by the Ghana Health Service. For example, the cost of direct staff time (nurses, counselors, and other medical professionals) is not included in the costs of each service in this particular study, because these medical professionals are not full-time MARP HIV programme staff members and spread their time across many different clinical services that are budgeted centrally by the Ghana Health Service. On the other hand, sensitivity training and training for staff on how to best provide targeted services to FSWs and MSM would be a cost specific to the MARP HIV programme.

Similarly, the cost of condoms is currently included as a direct cost component within the cost of an outreach service contact, because condom distribution was part of all outreach contacts included in the study. However, condoms are currently centrally procured by the Ghana Health Service for the country, and not disaggregated by the risk groups to whom they are distributed.

In this context, the relative cost of condoms should be removed from the overall cost for outreach service contacts at the national level, since the government has covered this proportional cost through a separate procurement mechanism. To help isolate the costs directly attributed to the MARP HIV programme and avoid double costing, programme planners can refer to the costing by cost category data from the main study report's Annex 2: Details on Costing Methods and Analysis. For easy reference, that annex has been reproduced in Annex D of this *Data Use Guide*.

ANNEX A. COSTING WORKSHEET

Step 1. Determine a standard service package

The first step in costing is to determine what the standard service package (i.e., what mix of services will be offered) will be. A menu of typical MARP services—as outlined by Ghana's MARP Strategic Framework 2011–2015—is shown in Table 1. Programme planners are strongly encouraged to use this menu of services and the resources outlined in Annex B—as well as the current literature—to determine which services will best fit their client population and to design a tailored service package. Use the table below to outline a standard service package.

Step 2. Determine Programme Reach

Next, determine at what intensity over the course of one year each of these services will be provided (i.e., the number of service contacts for each service or how many times contact will be made with each client). Use the table below to note the number of service contacts per year for each service, as appropriate for overall programme reach.

Standard Service Package and Programme Reach for _____
(MSM or FSW)

	Services	Programme Reach *(Number of service contacts per year)*

Step 3. Obtain Accurate Size Estimates of the Service Population

Accurate size estimates are important for defining the total population in need of services that will be used to determine the annual programme target (see Step 5), although obtaining accurate size estimates of MARPs can be incredibly challenging. Programme planners should consult national data sources (e.g., HIV surveillance surveys, demographic health surveys) and consult expert resources such as the UNAIDS/WHO *Guidelines on Estimating the Size of Populations Most at Risk to HIV* (listed in Annex B).

Step 4. Project Annual Costs

Use this equation: Average costs for reaching 1 client for 1 year = (cost per service contact 1 * number of contacts per year) + (cost per service contact 2 * number of contacts per year) + (cost per service contact 3 * number of contacts per year) + (cost per service contact 4 * number of contacts per year)

Step 5. Determine Annual Programme Target

_____ * _____

(Total population in need of services) (Percentage of the population the programme will aim to reach in 1 year)

= Programme target per year = _____

Step 6. Project National Annual Costs

_____ * _____

(Average cost for reaching 1 client for 1 year) (Population size)

= National costs for providing HIV services to _____= _____

(Target population, i.e., MSM or FSW)

ANNEX B. RESOURCES FOR PROGRAMME PLANNERS

The resources listed below provide additional guidance for national programme planners, donors, and other stakeholders seeking to plan and budget for MARP-specific HIV programmes and services.

Joint United Nations Programme on HIV/AIDS (UNAIDS). 2011. *Resource Kit for Global Fund HIV Proposals – Round 11*. Retrieved September 3, 2013, from www.unaids.org/en/ourwork/programmebranch/programmeeffectivenessandcountrysupportdepartment/aideffectivenesscountrycapacitydivision/resourcekit/

Description: In an effort to support quality high-proposals to the Global Fund to Fight AIDS, Tuberculosis and Malaria, WHO and UNAIDS developed a resource kit with numerous technical briefs including those covering key populations (e.g., sex worker and men who have sex with men and transgender people) and a toolkit for targeted populations (i.e., MARPs).

Koleros, Andrew. 2012. *Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex with Males: Ghana*. Washington, DC: Futures Group, Health Policy Project.

Description: This document constitutes the main study report on which this *Data Use Guide* is based. It includes detailed study results and costing data.

President's Emergency Plan for AIDS Relief (PEPFAR). 2011. *Technical Guidance on Combination HIV Prevention.* Retrieved September 3, 2013, from www.pepfar.gov/documents/organization/164010.pdf

Description: As part of PEPFAR's overall prevention strategy, this guidance document addresses prevention programs for MSM.

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. 2010. *Guidelines on Estimating the Size of Populations Most at Risk to HIV*. Geneva: WHO and UNAIDS. Retrieved September 3, 2013, from www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/2011_estimating_populations_en.pdf

Description: This document provides guidance on how to conduct population size estimate studies to measure and understand MARPs.

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. 2011. *Guidelines on surveillance among populations most at risk for HIV*. Geneva: WHO and UNAIDS. Retrieved September 3, 2013, from www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/20110518_Surveillance_among_most_at_risk.pdf

Description: This document provides guidance on how to develop and maintain HIV surveillance among populations most at risk for HIV to improve both the overall understanding of countries' HIV epidemics and their responses.

World Health Organisation. 2011. *Prevention and Treatment of HIV and Other Sexually Transmitted Infections Among Men Who Have Sex With Men and Transgender People: Recommendations for a public health approach.* Retrieved September 3, 2013, from www.who.int/hiv/pub/guidelines/msm_guidelines2011/

Description: Designed primarily for use by national public health officials and managers of HIV/AIDS and STI programmes, NGOs (including community and civil society organisations), and health workers, these guidelines provide recommendations for regional and country partners on appropriate interventions designed to address the needs of MSM and transgender people.

World Health Organisation. 2012. *Prevention and Treatment of HIV and Other Sexually Transmitted Infections for Sex Workers in Low- and Middle-Income Countries: Recommendations for a public health approach.* Retrieved September 3, 2013, from www.who.int/hiv/pub/guidelines/sex_worker/en/index.html

Description: Designed primarily for use by national public health officials and managers of HIV/AIDS and STI programmes, NGOs (including community-based and civil society organisations), and health workers, these guidelines provide technical recommendations on effective interventions for preventing and treating HIV and other STIs among sex workers and their clients.

ANNEX C. SERVICE PACKAGE EXAMPLES

The following tables present the package of services for FSWs and MSM as outlined by the GAC's MARP Operational Plan Framework 2011–2013 and by those used as illustrative examples (Scenario 2 from the main study) for this *Data Use Guide*.

Comprehensive Package of Services, by MARP Subgroup

The Female Sex Worker Comprehensive Package of Services

HIV Prevention	HIV Treatment, Care, and Support	Psychosocial Support
• Condoms and lubricants • HIV testing and counselling • STI screening and treatment • Targeted BCC • Sexual and reproductive health, including PMTCT • Post-exposure prophylaxis in cases of rape and sexual assault	• Prevention, diagnosis, and treatment of OIs/TB • STI treatment • Antiretroviral therapy • Palliative care, including symptom management • Home-based care • Nutrition support	• Mental health diagnosis, counselling, and treatment • Legal advice and support • Income generation and alternative livelihood access • Child care and support • Personal development and empowerment • Establishment of peer support groups and networks • Training and involvement of non-paying partners
If required: • Harm reduction services • Overdose management • Drug detoxification • Drug dependence treatment		
Cross-cutting elements • MARP-friendly drop-in centres and clinics • Case management • Peer education • Life skills training • Referrals to services • Risk assessment and reduction		

The MSM Comprehensive Package of Services

<table>
<tr><th>Prevention</th><th>HIV Treatment, Care, and Support</th><th>Psychosocial Support</th></tr>
<tr><td>• Condoms and lubricants
• HIV testing and counselling
• STI screening and treatment
• Targeted BCC
• Male sexual health
• Post-exposure prophylaxis in cases of rape and sexual assault</td><td rowspan="2">• Prevention, diagnosis, and treatment of OIs/TB
• Vaccination, diagnosis, and treatment of viral hepatitis
• Antiretroviral therapy
• STI treatment
• Palliative care, including symptom management
• Home-based care
• Nutrition</td><td rowspan="2">• Mental health diagnosis, counselling, and treatment
• Legal advice and support
• Income generation and employment
• Personal development and empowerment
• Establishment of peer support groups and networks</td></tr>
<tr><td>If required:
• Harm reduction services
• Overdose management
• Drug detoxification
• Drug dependence treatment</td></tr>
<tr><td colspan="3">Cross-cutting elements
• MARP-friendly drop-in centres and clinics
• Case management
• Peer education
• Life skills training
• Service referrals
• Risk assessment and reduction</td></tr>
</table>

ANNEX D. DETAILS ON COSTING METHODS AND ANALYSIS

This table has been reproduced from the main study report, *Unit Cost of Providing Key HIV Services to Female Sex Workers and Males Who Have Sex with Males.* It can help programme planners isolate the costs directly attributed to the MARP HIV programme and avoid double costing.
For each main type of input, the table below describes the method and sources for estimating quantities of inputs, prices, and unit costs. The inputs are grouped into categories of (1) direct costs per visit, (2) indirect costs directly associated with the MARP programme, and (3) general support costs.

Direct Costs per Visit

Quantities	Sources	Comments	Prices	Sources	Comments
Staff Time					
Average number of minutes each programme staff directly provides services to the typical client, by type of service	Interviews with programme staff	Reported average times may not reflect real resource use Reported average times do not incorporate down time and may underestimate true resource cost	Calculated per minute of compensation for categories of salaried staff Calculated per contact per staff receiving motivation	Salary scales provided from the central level and motivation costs provided by intervention sites	Compensation includes salary and benefits
IEC Materials					
Average quantity used per service contact Per price item multiplied by average quantity of items used in a service contact	Programme interviews with staff		Price of item used	Central-level data, including design and production costs	
Prevention Commodities					
Average quantity distributed/sold per service contact Price per item multiplied by average quantity of items distributed/sold in	Programme staff interviews		Price of item used	Estimates by authors based on international and local prices	

Quantities	Sources	Comments	Prices	Sources	Comments
a service contact					
Other Consumables and Supplies					
Average quantity used per service contact Per price item multiplied by average quantity of items used in a service contact	Programme staff interviews		Price of item used	Estimates by authors based on international and local prices	
Laboratories					
For each test, quantity for one client For each test, price per test *average number of tests per client * percent of clients getting tested; calculated separately for HIV-positive and HIV-negative individuals	National HTC guidelines		Cost per laboratory test	National cost quantification (2011)	

Other Direct Costs Associated with Service Delivery

Quantities	Sources	Comments	Prices	Sources	Comments
Staff Time (Professional Non-client Time)					
Number of professional staff and percentage of non-client time spent on MARP programme in a year	Programme staff interviews		Calculated per minute of compensation for categories of staff	Salary scales provided from central level	Compensation includes salary and benefits
Vehicle Costs					
	Programme staff interviews		Replacement cost of item, straight-line depreciation by useful life	Price estimates by authors based on local prices; useful life set by authors using international standards	
Programme Equipment					
	Programme staff interviews		Replacement cost of item, straight-line depreciation by useful life	Price estimates by authors based on local prices; useful life set by authors using international standards	
Physical Site Costs (Drop-in Centres)					
Number of square metres of physical space used by MARP programme	Measured at each DIC		Cost per square metre based on rental cost of equivalent commercial space; yearly cost per square metre * number of square metres	Authors' estimates based on information from local property valuation experts	

Quantities	Sources	Comments	Prices	Sources	Comments
Staff Training					
Fixed quantity of training costs per intervention site	Programme staff interviews		Total yearly amount spent on training/ MARP service contacts		
Programme Running Costs					
Total yearly cost/MARP service contacts			Annual costs for DIC as a whole	Programme staff interviews	

Indirect Costs Associated with Service Delivery at the Intervention Site

Quantities	Sources	Comments	Prices	Sources	Comments
Staff Time (Administrative Non-client Time)					
Number of administrative staff and percentage of non-client time spent on MARP programme in a year	Programme staff interviews		Calculated per minute of compensation for categories of staff	Salary scales provided from central level	Compensation includes salary and benefits
Office Equipment					
Number and type of equipment used in each visit type; yearly depreciated replacement cost * use in MARP programme as percentage of total use by NGO/MARP service contacts	Programme staff interviews		Replacement cost of item, straight-line depreciation by useful life	Price estimates by authors based on local prices; useful life set by authors using international standards	
Physical Infrastructure of Administrative Site					
Number of square metres of physical space used in MARP programme	Measured at each intervention site		Cost per square metre based on rental cost of equivalent commercial space; yearly cost per square metre *	Authors' estimates based on information from local property valuation experts	

Quantities	Sources	Comments	Prices	Sources	Comments
			number of square metres		
Transport Costs					
Total yearly cost * MARP usage as proportion of total NGO usage/MARP service contacts			Annual transportation costs for NGO	Programme staff interviews	
Public Utilities					
Total yearly cost * MARP usage as proportion of total NGO usage/MARP service contacts			Annual costs for entire NGO	Programme staff interviews	
Maintenance and Repair (Office Equipment)					
Total yearly cost * MARP usage as proportion of total NGO usage/MARP service contacts			Annual costs for entire NGO	Programme staff interviews	
Indirect Costs per Service Contact for General Programme Support					
Total support costs allocated to MARP programme/total number of service contacts	FHI 360, WAPCAS, GAC (2011); authors' calculations		Total annual MARP support costs	FHI 360, WAPCAS, GAC (2011)	

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For more information, contact:

Health Policy Project
Futures Group
One Thomas Circle NW, Suite 200
Washington, DC 20005
Tel: (202) 775-9680
Fax: (202) 775-9694
Email: policyinfo@futuresgroup.com
www.healthpolicyproject.com