# UGANDA Service Provision Assessment Survey 2007



Key Findings on HIV/AIDS and STIs This report summarises the key findings on HIV/AIDS and STIs of the 2007 Uganda Service Provision Assessment (USPA) Survey, carried out by the Uganda Ministry of Health in collaboration with the Uganda Bureau of Statistics. Macro International Inc. provided technical assistance. The 2007 USPA is part of the worldwide MEASURE DHS project which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programmes. The survey was funded by the United States Agency for International Development (USAID), the President's Emergency Plan for AIDS Relief (PEPFAR), and the President's Malaria Initiative (PMI).

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UGANDANS AND AMERICANS IN PARTNERSHIP TO FIGHT HIV/AIDS





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## Introduction

The HIV/AIDS component of the 2007 Uganda Service Provision Assessment (USPA) Survey provides a comprehensive picture of the availability and quality of HIV/AIDS health services nationwide. The survey looked closely at the strengths and weaknesses of facility-based services related to HIV/AIDS, such as counselling and testing (CT), preventing mother-to-child-transmission (PMTCT) of HIV, and care and support services (CSS).

The USPA was carried out by the Ministry of Health in collaboration with the Uganda Bureau of Statistics. Macro International Inc. provided technical assistance. The survey was funded by the United States Agency for International Development (USAID), the President's Emergency Plan for AIDS Relief (PEPFAR), and the President's Malaria Initiative (PMI).

The major objectives of the 2007 USPA are to:

- determine the level of preparedness of health facilities for providing quality services;
- provide a comprehensive body of information on the performance of the full range of public and private health care facilities that offer reproductive, child health, and HIV/AIDS services;
- pinpoint strengths and weaknesses in the delivery of health care services in order to better target interventions;
- describe the processes used in providing child, maternal, and reproductive health services and the extent to which accepted standards for quality service provision are followed;
- provide information for periodically monitoring progress in improving the delivery of services at Ugandan health facilities;
- provide input into the evolution of a system of accreditation of health facilities in Uganda; and
- provide baseline information on the capacity of health facilities to provide basic and advanced level HIV/AIDS care and support services.

The USPA involved a nationally representative sample of 491 facilities, including: 1) all national referral hospitals, regional hospitals, general hospitals, and other hospitals; and 2) a sample of health centre (HC-IV, HC-III, and HC-II). Facilities are also identified by managing authority, that is, facilities run by the Government of Uganda or by private groups including for profit, NGO, and faith-based organizations. Facilities were selected from all nine regions of Uganda. Trained interviewers collected the data between July and October 2007.

This report summarises the major USPA findings on HIV/AIDS and STIs based on interviews and observations at 491 health care facilities. To put the results of the 2007 USPA into context, this report also includes data from the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS) based on data collected from almost 20,000 Ugandans and the 2006 Demographic and Health Survey based on data from over 11,000 Ugandans. This information is provided in yellow boxes.

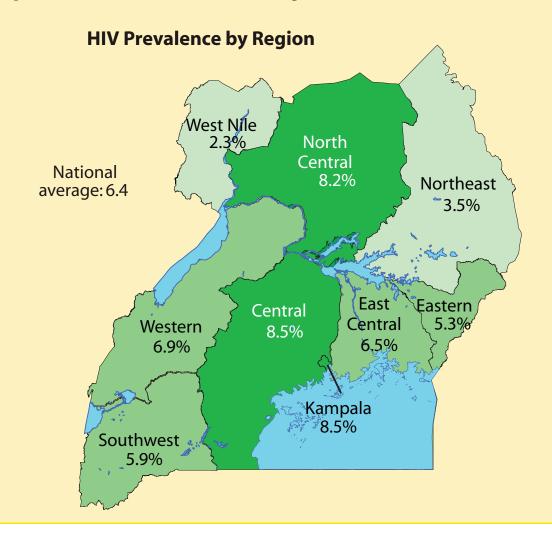
## **HIV/AIDS in Uganda**

According to the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS), the national HIV prevalence is 6.4 percent for women and men ages 15 to 49. Women are more likely to be HIV-positive than men (7.5 percent and 5.0 percent, respectively).

HIV prevalence in Uganda varies widely by region. Regions with the highest HIV prevalence are Central (8.5 percent), Kampala (8.5 percent) and North Central (8.2 percent). Areas with the lowest prevalence include West Nile (2.3 percent) and Northeast (3.5 percent). HIV prevalence is almost twice as high in urban areas as in rural areas. HIV infection is highest among women ages 30 to 34 years and men ages 40 to 44 years.

The 2006 UDHS recently assessed HIV/AIDS related behaviours in Uganda. Despite widespread knowledge of HIV/AIDS, only a minority of Ugandans has been tested for the virus, and many still practice higher-risk sex. Only 25 percent of women and 21 percent of men had ever been tested and received their results. Among women who gave birth in the two years before the survey, 39 percent received counselling about HIV during ANC visits. Only 18 percent, however, received counselling, took an HIV test, and received results.

Sixteen percent of women and 36 percent of men had higher-risk sex (sex with a non-marital, noncohabiting partner) in the 12 months before the survey. Among these respondents, one-third of women and 57 percent of women used a condom at last higher-risk sex.



## Availability of HIV/AIDS Services in Uganda

The availability of HIV/AIDS services varies widely throughout Uganda. Six in ten health care facilities in Uganda provide some care and support services (CSS) for HIV. Far fewer facilities, however, provide HIV testing and prevention services. Only three in ten (29 percent) of all health facilities in Uganda have an HIV testing system. A similar proportion of facilities provides at least one of the four elements of prevention of mother-to-child transmission (PMTCT)—pre and post-test counselling, ARV prophylaxis, infant feeding counselling, or family planning counselling or referral.

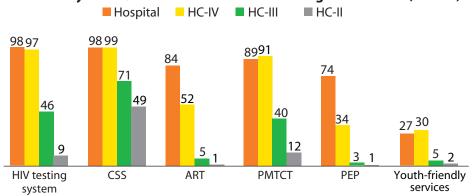
Other HIV-related health services are offered by even fewer facilities nationwide. Only 8 percent of facilities provide antiretroviral therapy (ART), and only 6 percent offer post-exposure prophylaxis for health facility staff.

Overall, HIV/AIDS services are more likely to be available in hospitals and HC-IVs than in other facility types.

	Percent of Facilities Offering Services (N=491)						
	HIV Testing System	Care and Support Services (CSS)	Anti- Retroviral Therapy (ART)	Preventing Mother-to- Child-Trans- mission (PMTCT)*	Post- Exposure Prophylaxis (PEP)	Youth- Friendly Testing Services (YFS)	
Central	47	80	12	58	7	9	
Kampala	98	94	68	45	60	43	
East Central	23	37	5	21	4	3	
Eastern	18	55	5	16	5	2	
Northeast	13	25	5	16	2	3	
North Central	38	54	12	31	8	8	
West Nile	17	48	5	16	5	4	
Western	32	50	6	22	4	5	
Southwest	21	94	5	20	7	2	
TOTAL	29	61	8	28	6	5	

### Overview of HIV-Related Health Care Services in Uganda: Percent of Facilities Offering Services (N=491)

\* One or more PMTCT services: pre- and-post test counselling and HIV testing services, ARV prophylaxis, infant feeding counselling, or family planning counselling or referral



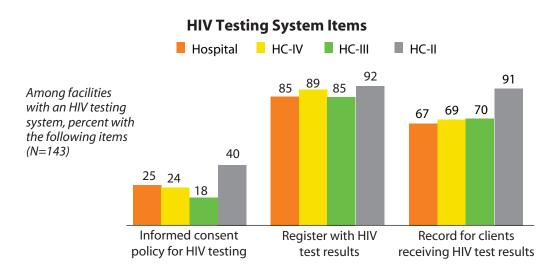
Availability of HIV/AIDS-Related Services among All Facilities (N=491)

## **HIV Testing**

Generally accepted definitions for HIV testing services, which can include voluntary counselling and testing (VCT), include pre- and post-test counselling, informed consent, and the testing itself. For the purposes of the USPA, a facility is defined as any health service establishment where services related to HIV/AIDS are offered. Within one facility, for example, there may be several locations where the same service is offered. Each of these locations is defined as a service site. A facility is considered to have an HIV testing system if it conducts the test in the facility or in an affiliated external laboratory, or has a system for receiving results of tests conducted in a non-affiliated testing site in order to provide post-test services.

Testing services vary significantly by region, type of facility, and managing authority. Three in ten (29 percent) facilities in Uganda report having an HIV testing system. Almost all hospitals (98 percent) and all HC-IVs (97 percent) have an HIV testing system. HC-IIIs (46 percent) and HC-IIIs (9 percent), the most widely accessible health care facilities, are less likely to have CT. The availability of a testing system ranges from 13 percent of facilities in Northeast to 98 percent in Kampala. There is little difference in availability of HIV testing between government and private facilities.

Among facilities reporting an HIV testing system, only three-quarters had the HIV test available in the facility or in an affiliated lab. Only one-quarter of facilities reporting HIV testing had an informed consent policy in all relevant service sites. Most, however (87 percent), did have a register with HIV test results; slightly fewer (73 percent) had a record for clients receiving test results.



## **Care and Support Services**

Care and support services (CSS) include any health services that support and improve the life of an HIVinfected person. CSS may include the treatment of opportunistic infections (OIs), palliative care and social and psychological support services. Since HIV-infected persons are at higher risk of developing opportunistic infections like TB as a result of their suppressed immune system, immediate treatment of OIs and other infections is essential. Basic CSS (any curative or preventive care services, referrals for counselling, and or/social support services for help living with HIV/AIDS) are available at almost all hospitals and HC-IVs in Uganda, compared to only 71 percent of HC-IIIs and 49 percent of HC-IIs. Clinical CSS services (the basic services, plus treatment for OIs, systemic treatment for fungal infections, treatment for Kaposi's sarcoma, palliative care for patients, and ART) are available in 57 percent of facilities.

Good record keeping systems are not universal in CSS facilities. More than half of facilities providing CSS have individual client charts in all eligible units, and 61 percent have a register with HIV/AIDS related client diagnosis observed in any unit. Record systems for individual appointments were observed in all relevant sites in only 16 percent of facilities. This lack of good record keeping makes it difficult to monitor the disease burden of HIV and to properly plan allocation of funds, medicines and other supplies.

## **Tuberculosis in HIV Service Sites**

Tuberculosis (TB) is a leading cause of death among people infected with HIV. The World Health Organisation recommends directly observed treatment short-course (DOTS) to treat TB. DOTS ensures that patients take their drugs regularly and complete their treatment. This regime cures patients and helps prevent drug resistance.

Overall, 55 percent of facilities offering any CSS provide TB diagnosis or treatment and/or follow-up services or both. The availability of TB treatment varies by zone, ranging from a low of 38 percent in Southwest to a high of 93 percent in Kampala. Among facilities offering any CSS, only 45 percent report that they are part of the national DOTS programme and 41 percent of facilities say they follow the DOTS strategy. However, a substantial percentage of facilities do not have all of the elements needed for proper TB treatment. All first-line TB medicines (any combination of isoniazid, rifampicin, ethumbutol, and Pyrazinamide) are available in 87 percent of facilities offering CSS and following the DOTS strategy. Of these facilities, only 55 percent have observed client registers for DOTS and only 39 percent have treatment protocols.

	Any TB diagnostic or treatment services	Report they are part of national DOTS programme	Follow DOTS strategy*
Central	46	36	39
Kampala	93	57	52
East Central	54	52	53
Eastern	65	50	58
Northeast	63	58	19
North Central	82	75	79
West Nile	75	64	58
Western	74	52	35
Southwest	38	33	25
TOTAL	55	45	41

#### TB Treatment and/or Follow-up Using DOTS Percent among Facilities Offering CSS (N=299)

\* Treatment strategy followed is either direct observed for two months with six months of follow-up treatment, or direct observed for eight months.

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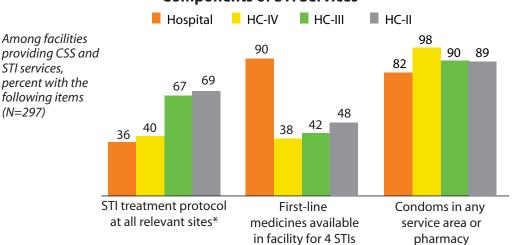
## Sexually Transmitted Infections Services in HIV Service Sites

Sexually transmitted infections (STIs) are a known risk factor for contracting HIV. Thus, facilities where HIV/AIDS services are offered are prime locations for the counselling, diagnosis, treatment, and prevention of STIs and vice versa. In Uganda, 99 percent facilities offering CSS for HIV/AIDS also treat STIs. However, only 64 percent of these health care facilities have STI treatment protocols in all relevant sites. Hospitals are least likely to have treatment protocols at all sites. Hospitals have more treatment sites than health centres.

Medications for treating four common STIs (syphilis, chlamydia, trichomoniaisis, and gonorrhoea) are available in about half (48 percent) of facilities offering CSS for HIV/AIDS services. Medicines are more likely to be available in hospitals (90 percent) than in health centres (about 40 percent in HC-IVs and HC-IIIs, almost half in HC-IIs). However, only 2 percent of hospitals offering clinical CSS have medicines for treating herpes infection (HSV-2) which infects almost 45 percent of women and men (UHSBS).

Condoms are available in 9 out of 10 facilities offering CSS for HIV and STIs in Uganda. They are available in almost all HC-IVs (98 percent) compared to only 82 percent of hospitals. Government facilities are much more likely than private facilities to provide condoms (96 versus 73 percent).

The quality of STI services is uneven, however. Only 26 percent of facilities offering CSS and STI services have all three elements for quality STI services: treatment protocols at all sites; medicines for treating common STIs; and condoms.



### **Components of STI Services**

## **Treatment of Opportunistic Infections**

Correct treatment of opportunistic infections (OIs) improves the quality and extends the life span of people living with HIV and AIDS. In addition to TB, common OIs include topical fungal infections, chronic diarrhoea, and bacterial pneumonia. Overall 57 percent of all health facilities in Uganda provide treatment for OIs.

Most facilities offering clinical CSS for HIV/AIDS can provide treatment for bacterial infections. Overall, 63 percent have at least one medicine for managing bacterial pneumonia, and 87 percent have at least one medicine to manage other bacterial infections. More than half (57 percent) have intravenous fluid with infusion sets for rehydration; 83 percent have oral rehydration salts. Only 20 percent, however, have at least one medicine for chronic diarrhoea. Half can treat topical fungal infections.

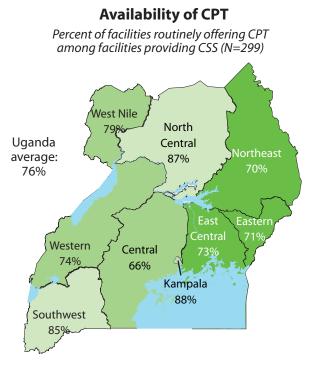
The quality of OI treatment is not clear, however. Few facilities have providers trained to treat OIs. Overall, only 28 percent of facilities that offer CSS have at least one provider who received OI training in the three years preceding the survey and only 9 percent of facilities have a provider trained to treat AIDS in children. Not surprisingly, lower level health facilities are the least likely to have a trained provider.

The lack of training is all the more serious as not all sites have written guidelines or protocols for treating OIs. Guidelines or protocols for treating OIs are available in all relevant sites in 62 percent of facilities that offer clinical CSS. This percentage increases to 75 percent if the facilities are assessed for availability of guidelines/protocols at *any* relevant site.

### Co-trimoxazole Prophylaxis

Co-trimoxazole prophylaxis (CPT) for the prevention of opportunistic infections in people living with HIV/AIDS is an integral component of the HIV/AIDS CSS package in Uganda. Three-quarters of facilities providing CSS offer CPT routinely to HIV/AIDS patients. Another 14 percent provide CPT selectively. Hospitals and HC-IVs are highly likely to routinely offer CPT (over 90 percent). Government facilities are more likely than private facilities to routinely offer CPT (81 versus 62 percent). CPT is most available in Kampala and North Central (also where HIV prevalence is the highest) and least available in Eastern, Northeast, and Central.

Although three-quarters of CSS facilities offer CPT, only 75 percent of these facilities had co-trimoxazole actually available. Almost all hospitals had co-trimoxazole available, in comparison to about three-quarters of the health centres. One-quarter of facilities had a provider of CPT trained in the three years before the survey, but only 5 percent of facilities offering CPT had a protocol available in all service sites.



## **Advanced Clinical Care and Support Services**

Ugandans have been dealing with HIV/AIDS for quite sometime, however, advanced health services for HIV/AIDS are in the early stages of development and are not widely available. These types of services include: capacity of laboratories to diagnose severe OIs and availability of more than one type of medication to treat them; availability of services or a formal referral system for psychosocial and socioeconomic care and support; links to home-based care; antiretroviral therapy; and post-exposure prophylaxis.

Laboratory capacity to monitor HIV/AIDS patients is available in only a small percentage of facilities that offer clinical CSS. For example, only 4 percent of facilities can do a white cell count and only 23 percent can check haemo-

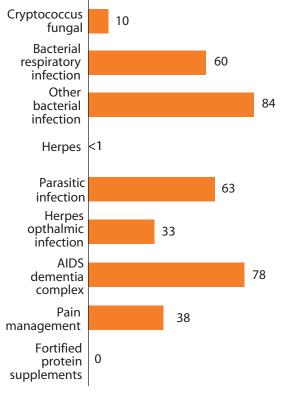
globin or hematocrit, important indicators for anaemia. These services are much more common in hospitals than other types of facilities and more common in private facilities than in government facilities. The presence of treatment guidelines varies by type of facility and zone. Overall, 62 percent of facilities offering clinical CSS have guidelines and protocols for treating opportunistic infections in all clinical CSS sites.

While medicines to treat bacterial infections and AIDS dementia complex are common, only 10 percent have at least two medicines to treat cryptococcus fungal infection, only one-third can treat herpes ophthalmic infection, and only 38 percent have two medicines to treat or manage pain. Almost no facilities have two medicines to treat herpes, and almost no facilities can provide fortified protein supplements. Less than 10 percent of facilities offering any CSS can treat Kaposi's sarcoma.

Only 19 percent of CSS facilities offer home care, either in the facility or through outreach. Ten percent of CSS facilities offer ART and have links with communitybased health workers for ART services.



(c) 2006 Joseph W. Ouma, Courtesy of Photoshare. Adyebo, an HIV/AIDS patient at Lira Hospital in Uganda, visits with his brothers (standing). They visit him regularly so that he doesn't suffer from stigma and discrimination.



#### Percent of Facilities with at Least Two Types of Medicines to Treat Each Opportunistic Infection

Among facilities offering clinical CSS (N=279)

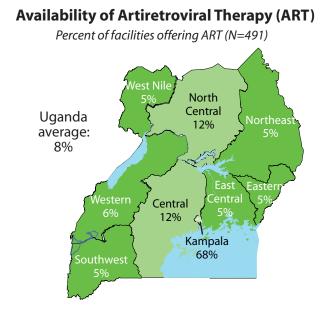
## Antiretroviral Therapy

Antiretroviral drugs can significantly prolong and improve the quality of life for people living with HIV and AIDS. Not all HIV/AIDS clients, however, are eligible for these medicines. According to national guidelines, initiating antiretroviral therapy (ART) should be based on the level of HIV immune suppression as assessed by WHO HIV stage (presence or absence of certain HIV-related symptoms) or a CD4+ cell count. The Government of Uganda started providing free ART services in June 2004.

Quality ART services include the following:

- trained staff;
- protocols and guidelines for care and support services;
- consistent supply of antiretroviral (ARV) medicines;
- a system for client appointments and follow-up services;
- individual client records for continuity of care; and
- record-keeping systems to ensure ARV compliance.

Nationwide, only 8 percent of all health facilities prescribe ART and/or provide medical follow-up. ART services are mostly available at hospitals (84 percent) and HC-IVs (52 percent). ART is most available in the regions with the highest HIV prevalence (Central, North Central, and Kampala). Availability is highest in the capital, while only 12 percent of facilities in Central and North Central can provide ART.



The quality of ART services varies among health care facilities. Only 81 percent of facilities prescribing ART and/or medical follow-up had the first-line adult regimen available on the day of the survey. The paediatric regimen was available in only 13 percent of ART facilities. ARV stock-outs are common; more than 80 percent of facilities that prescribe ART had stock-outs of first-line ARVs within six months of the survey. Irregular use of ARVs can compromise patient treatment and also lead to the development of drug-resistant strains of HIV. National guidelines for managing ART are available in one-third of hospitals, HC-IVs, and HC-IIIs that prescribe ART and/or medical follow-up.



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An HIV-positive beneficiary receives anti-retroviral medications during a regular home visit by a Ugandan NGO worker in Kampala, Uganda.

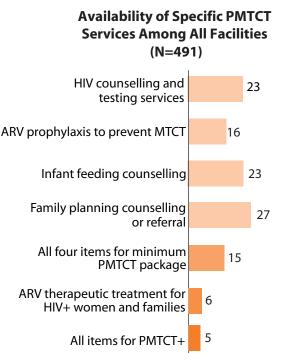
## Preventing Mother to Child Transmission of HIV

Mother-to-child transmission (MTCT) of HIV occurs when the virus is passed from an HIV-infected mother to her baby during pregnancy, delivery, or breastfeeding. The prevention of mother-to-child transmission (PMTCT) programme aims to reduce the risk of HIV transmission. PMTCT services are most often offered in conjunction with antenatal and delivery services. Generally accepted components of PMTCT are:

- counselling and testing (CT) pregnant women for HIV infection;
- providing HIV-positive women with information on infant feeding practices;
- providing family planning counselling or referral; and
- providing prophylactic ARV to HIV-positive women and their newborns within 72 hours of birth.

The Government of Uganda introduced PMTCT services in 2000. The package of services varies greatly from facility to facility. As of 2007, only 28 percent of all facilities nationwide offer *any* component of PMTCT services, and only 15 percent offer *all four* components for the minimum PMTCT package (HIV testing with pre- and post-test counselling, ARV for mother and newborn, counselling on infant feeding, and FP counselling or referral). The minimum PMTCT package is most likely to be found in hospitals and HC-IVs. Availability of the minimum package varies across regions, from only 10 percent in Northeast, West Nile, and Western to a high of 34 percent in Kampala.

PMTCT+, an enhanced programme that includes ART for HIV-positive pregnant women and their families, is far less available. Only 5 percent of *all* health care facilities provide PMTCT+ services. As expected, hospitals are most likely to have all items for the PMTCT+ package.



#### Putting the USPA into Context: Knowledge of Mother-to-Child Transmission

According to the 2004-05 UHSBS, between 50 and 60 percent of women and men know that HIV can be transmitted during breastfeeding. Slightly fewer know that antiretroviral drugs can reduce the risk

of MTCT. Only about one-third of women and men know *both* that HIV can be transmitted through breastfeeding and ARVs taken during pregnancy can reduce the risk of HIV transmission. It is important to note that knowledge of ARVs is fairly low in North Central (29 percent of women and 35 percent of men), one of the regions with the highest HIV-prevalence in the country.

According to the 2006 UDHS, only 18 percent of women who gave birth in the two years before the survey were counselled, tested for HIV, and received their test results.



(c) 2001 Hugh Rigby/CCP, Courtesy of Photoshare

## Youth-Friendly Counselling and Testing Services

Youth-friendly services (YFS) help young adults overcome barriers to accessing HIV/AIDS services. Ideally, YFS involve young people in all aspects of the programme's planning, operations, and evaluation. The services should include staff who are sensitive to youth culture and ethnic cultures as well as to issues of gender, sexual orientation, and HIV status. YFS usually have flexible hours, convenient locations, and walk-in appointments.

The USPA assessed the availability of youth-friendly HIV testing services in Ugandan health care facilities. Overall, only 5 percent of facilities offer youthfriendly HIV testing services. However, among facilities with an HIV testing system, 22 percent offer youth-friendly HIV testing services. Youth-friendly HIV testing services are most common in hospitals and HC-IVs and in facilities in Kampala. Of the facilities with any YFS, 77 percent have at least one provider trained to provide youth-friendly services. Far fewer (13 percent) facilities have appropriate guidelines on site.



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#### Putting the USPA into Context: HIV Knowledge among Youth in Uganda

Knowledge of how HIV is transmitted is crucial to helping people avoid being infected with HIV. The 2004-05 UHSBS asked young men and women ages 15-24 about their knowledge of HIV. Comprehensive knowledge is defined as: knowing that using condoms and having just one uninfected, faithful partner can reduce the chance of getting HIV; knowing that a healthy-looking person can have HIV; and rejecting the two most common myths about HIV transmission: "People get HIV from mosquito bites" and "People can be infected with HIV by sharing food with someone sick with AIDS." Overall, only 30 percent of young women and 35 percent of young men ages 15-24 had comprehensive knowledge of AIDS. Women and men in Central region and Kampala are most knowledgeable.

Young people were also asked if they knew where to buy or get condoms. Most men (77 percent) and about half of women (52 percent) know of at least one source for male condoms. Young people in urban areas are much more likely to know a source for condoms than those in rural areas.

About one-quarter of unmarried young women and one third of unmarried young men reported having sex in the year before the survey. Among these sexually active youth, only about half used a condom the last time they had sex.

## Post-Exposure Prophylaxis

Post-exposure prophylaxis (PEP) is the prophylactic treatment with antiretrovirals for persons who may have been exposed to HIV. Given the high prevalence of HIV in Uganda (6.4 percent), the risk of contracting HIV infection on the job is a real threat to everyone working in health care facilities. PEP should also be available for patients at high risk due to inadvertent exposure to HIV (for example, rape victims).

Only 6 percent of all health care facilities in Uganda offer PEP services to their staff. Moreover, among facilities reporting PEP services, only half have ARVs for PEP. Thus, protection for health care providers exposed to HIV on the job is very limited. It is possible that providers needing PEP are referred. However, USPA findings show that only 33 percent



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of facilities reporting that they offer PEP have any records/registers of staff receiving PEP, and only 6 percent have records monitoring full compliance.

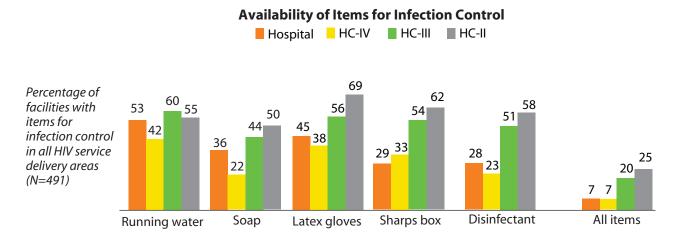
As expected, most PEP services are located in hospitals (74 percent); one-third of HC-IVs have PEP compared to less than 4 percent of HC-IIIs and HC-IIs. PEP services are available in 60 percent of facilities in Kampala but less than 10 percent of facilities in the other regions.

## Infection Prevention in HIV Service Areas

Infection prevention practices should be implemented in all health care facilities to protect both clients and providers from all infections, but especially from HIV/AIDS. The items needed to prevent infections include:

- running water and soap for hand washing;
- chlorine-based solution for decontaminating equipment;
- latex gloves;
- "sharps" container for the immediate and safe disposal of needles and blades; and
- written guidelines to enforce infection prevention practices.

Only 56 percent of facilities offering HIV services have running water in all HIV service areas, and fewer than half have soap in all service areas. Overall, only 22 percent of facilities have all items needed for infection control in all service sites. Interestingly, HC-IIIs and HC-IIs are much more likely to have all infection control items (20 and 25 percent, respectively) than hospitals or HC-IVs (7 percent each). Hospitals have more service sites than health centres. Infection control varies by region, as well. More than one-third of facilities in Western Region have all of the infection control items in all HIV service sites compared to only 11 percent in Southwest Region.



## Sexually Transmitted Infections in All Facilities

STIs are fairly common in Uganda, and yet the full scope of treatment is not available in most facilities. Almost all facilities offer STI services as a primary service, usually in the general out-patient department, as well as in the family planning service area and the ANC service area. STI services are available five days per week in 61 percent of facilities that offer the service. About two-thirds of facilities offer STI services in ANC, FP, and general outpatient areas.

Three-quarters of facilities use WHO's syndromic approach to diagnosing STIs. Less than half, however, have guidelines for syndromic management of STIs.

Only 12 percent of facilities offering STI services have all the items needed to support quality counselling (privacy, guidelines, visual aids or educational materials, individual client chart, and condoms in services area). Even fewer facilities (only 4 percent) have all the conditions needed to provide a quality physical examination (all infection control items, visual privacy, exam bed and exam light). Three-quarters of STI facilities have a passive partner follow-up system, meaning that they ask the client to notify his or her partner and refer him/her for treatment.

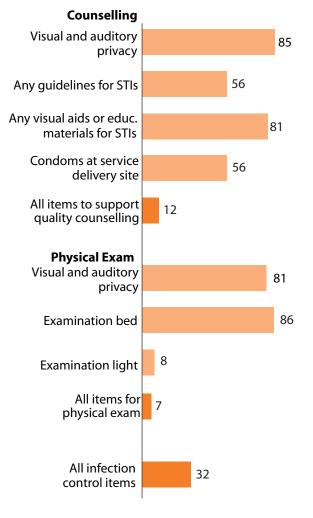
Although clients were seeking care due to symptoms of sexually transmitted infections, fewer than half underwent a physical examination of their genitals. Among the women who underwent a physical examination, providers washed their hands in only one quarter of cases. In most cases, however, the provider did wear clean gloves.

Observed STI consultations reveal some gaps in service provision. Only half of clients were reassured about confidentiality. While almost all clients were asked about their symptoms, only two-thirds were asked about their recent sexual contacts. Fewer were asked about symptoms in their partner or their partner status, i.e. whether they had multiple partners or their partners had other partners. Less than 20 percent of observed clients re-



Photo by Dr. Paul Ametepi, Macro International, Inc.

#### **Items to Support Quality STI Services**



Percent of facilities offering STI services (N=484)

STI-related counselling was inadequate during most observed consultations. Although 98 percent of observed clients received a prescription or medication, less than three-quarters included any mention of the relationship between the infection and sexual activity. Fewer than half included information about the risk of HIV/AIDS. Only 52 percent included discussion of use of condoms for prevention, and only 22 percent actually offered condoms to clients.

#### **STI testing and medication**

Most STI facilities do not have the capacity to test for the four major STIs and HIV/AIDS. Seventeen percent can test for syphilis, 12 percent can test for gonorrhea, and fewer than 1 percent of facilities can test for chlamydia. More than one in four facilities has wet mount test capacity, and 17 percent can test for HIV/AIDS.

Only 45 percent of facilities have medicines to treat these four major STIs. Two-thirds can treat trichomoniasis, chlamydia, or syphilis, while only slightly more than half can treat gonorrhea. Hospitals are more likely to have medicines to treat these STIs than health centres.

#### **Management practices**

STI-related record keeping is not consistently reliable. Only about half of facilities had a client register with any entries within the past week.

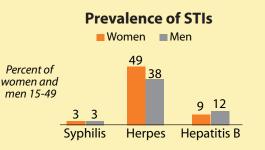
Facilities are said to have routine training if half of interviewed providers reported that they had received training related to their work during the year before the survey. Only about 4 in 10 facilities provided this level of training to STI service providers. One-quarter of interviewed STI providers were trained in any course related to HIV/AIDS in the year before the survey, while only 12 percent received any training in diagnosis or treatment for STIs. Personal supervision was much better—at least half of the STI providers at 92 percent of facilities were supervised at least once in the six months before the survey.

#### Putting the USPA into Context: STI Prevalence and Treatment in Uganda

The 2004-05 UHSBS asked sexually active men and women if they had an STI or STI symptom, such as a genital sore/ulcer or discharge, in the previous year. Overall, one-third of women and one-fifth of men reported having either an STI, abnormal discharge or genital sore/ulcer. These results, however, may underestimate the rate of STIs because many infec-

tions, especially in women, cause no symptoms. Of these adults, about 6 in 10 sought care for their STI from a health facility or a health professional.

The UHSBS also included testing for syphilis, herpes, and Hepatitis B. Overall, 3 percent of Ugandan woman and men age 15-49 are infected with syphilis, while 44 percent have herpes, and 10 percent have Hepatitis B.

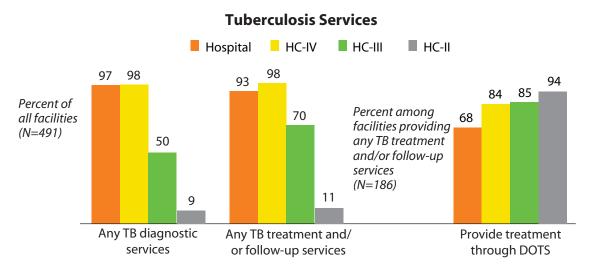


## **Tuberculosis in All Facilities**

Fewer than half of all facilities provide tuberculosis (TB) diagnosis, treatment, and/or follow-up services. TB services are available in all hospitals and HC-IVs, while three-quarters of HC-IIIs and less than 20 percent of HC-IIs provide these services. Facilities in Kampala, West Nile, and North Central are most likely to offer TB services.

Three in ten facilities offer TB diagnostic services. All hospitals and HC-IVs can diagnose TB. Government facilities are less likely to offer TB diagnostic services than private facilities (28 percent and 36 percent, respectively). Almost three in ten facilities diagnose TB using sputum microscopy, the recommended diagnostic procedure. However, only two-thirds of those that reported using the sputum test had all the items needed for conducting TB sputum tests available on the day of the survey. Most hospitals and HC-IVs had all items needed, compared to only 58 percent of HC-IIIs and 36 percent of HC-IIIs.

About four in ten facilities in Uganda provide TB treatment and/or follow-up services. Only 85 percent of these facilities follow DOTS (Directly Observed Treatment-Short Course). DOTS treatment is least common in hospitals (68 percent) and in private facilities (75 percent), while 94 percent of HC-IIs follow DOTS.



First-line anti-TB medicines were available on the day of the survey in 87 percent of facilities following the DOTS strategy. These medicines were most commonly found in hospitals (92 percent) and government facilities (90 percent) but only in 72 percent of HC-IIs. First-line TB medicines were also available in 87 percent of facilities offering TB treatment and/or follow-up services.

It is extremely important for TB patients to be screened for HIV, and vice versa, as these two infections often co-exist. Among the facilities offering any TB services, only 41 percent report referring all TB cases for HIV testing. Another 15 percent of facilities refer only those suspected to be HIV-positive. Upon review of records, 31 percent of facilities offering TB services had records of newly diagnosed TB clients referred for HIV testing. Forty percent had records of current TB clients who were co-infected with HIV.

## **Conclusions**

The first case of HIV/AIDS in Uganda was clinically diagnosed and reported in 1982 in the Rakai District. To address the epidemic, the Government established an AIDS Control Programme in the Ministry of Health in 1986. The Uganda AIDS Commission was established in 1990. The Uganda AIDS Commission is responsible for coordinating a national response to HIV in all sectors, including dissemination of messages about abstinence, mutual faithfulness, partner reduction, and condom use (ABC), as well as voluntary counselling and testing (VCT), prevention of mother-to-child transmission (PMTCT), STI control, antiretroviral treatment (ART), and HIV/AIDS care and support (CSS).

By 2007, 2.6 million Ugandans had been infected with HIV. Out of these, 1.6 million have died and 1 million are currently living with the disease.

The 2007 USPA provides important information for measuring progress in many of these areas. The findings from the USPA for HIV/AIDS will also serve to guide policy-makers and leaders as they evaluate existing programmes and craft new ones to best achieve national goals. Listed below are the main conclusions and key recommendations based on the USPA results.

#### **Conclusions:**

1. The USPA findings show a mixed picture of HIV-related health services in Uganda. Currently, only three in ten facilities offer HIV testing. Six in ten offer care and support services (CSS) for those living with HIV. In theory, 28 percent of facilities offer services for preventing mother-to-child transmission (PMTCT) of HIV, but only 15 percent have the four components needed for the minimum PMTCT package. Fewer than one in ten reach out to youth or provide antiretroviral therapy, post-exposure prophylaxis, and advanced care for people with advanced HIV infections. In addition, availability of HIV services is not consistent with the prevalence of infection. North Central, Central, and Kampala have the greatest HIV burden, but North Central lags behind the national average in provision of CSS, and only Kampala consistently provides care at a level much beyond the national average.

2. Ugandan health care facilities do not meet international standards for infection prevention; this puts both clients and providers at risk for HIV infection and a host of other life-threatening illnesses. Overall, only 22 percent of all health facilities have all the items needed to prevent infection in all HIV service delivery areas. Only 56 percent of facilities have running water and 46 percent have soap.

3. Basic CSS services, such as treating STIs and TB, are available in only 61 percent of all health care facilities. Other HIV-related health services are more frequently lacking and there is significant disparity in their availability among the zones. For example, only three in ten facilities report having a system to provide HIV testing services to clients, but availability ranges from 17 percent in West Nile to 98 percent in Kampala.

4. Availability of medicines varies widely by condition, by managing authority, and by regions. For example, among facilities that provide CSS, more than half have treatments on site for bacterial respiratory infections, and more than 80 percent can treat other bacterial infections. Three-quarters can treat AIDS dementia complex. But only one third can treat herpes ophthalmic infection, almost no facilities have two medication to treat herpes, and only 10 percent can treat cryptococcus fungus. Even simple conditions, such as chronic diarrhea and topical fungal infections are not widely treatable.

#### **Recommendations:**

1. The absence of running water and latex gloves in health care facilities puts everyone in the health care system at risk. High quality services must rest upon a solid infrastructure and safe conditions for clients and providers. All providers of health care—governmental and non-governmental agencies—need to place

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the highest priority on infection prevention. Supervisors should be held accountable for monitoring the presence of infection control materials in all relevant locations in a facility and ensuring that staff are adhering to expected practices. In addition, policies are needed to establish infection prevention committees in all health care facilities to ensure appropriate practices are carried out at all levels, and these practices should be reinforced through written guidelines and necessary equipment in all service sites within a facility.

2. Stockouts of first-line ARVs and TB medications contribute to drug-resistant pathogens, threatening the welfare of many Ugandans. Efforts to ensure a steady supply of these life-save drugs are essential.

3. Multidrug resistant tuberculosis is a growing threat worldwide. All international agencies support the directly observed treatment short-course (DOTS) strategy for treating TB. In Uganda only half of all health care facilities that provide care and support for HIV are part of the national DOTS system. Not surprisingly, government-managed facilities are most likely to be part of the DOTS system. Bringing all facilities, governmental and nongovernmental, into the national DOTS system is critically important for controlling TB and increasing the life span of people with HIV.

4. More professional training in critical areas, such as treating opportunistic infections, should be offered to the health care workers most likely to treat and interact with clients seeking HIV/AIDS-related health care services.

5. According to the most recent UDHS, 44 percent of all men have ever used condoms. Making condoms readily available is critically important for increasing use. Nationwide, just over half (56 percent) of health care facilities offering STI services have condoms available on site or in the pharmacy. Furthermore, condoms were discussed in only half of observed STI consultations, and offered to only 22 percent of clients. Health facilities should promote open discussion of HIV prevention and condom use. Providers must be encouraged to provide this counselling and condoms must be made readily available.

6. Health care providers need easy access to treatment guidelines and protocols to treat clients correctly. This is especially true for life-threatening illnesses, like HIV/AIDS, and many of the associated opportunistic infections. Guidelines are not widely available in Uganda facilities, especially not in every service site in hospitals where most people with HIV seek treatment. Making guidelines and treatment protocols available in every health care facility and particularly every hospital is easy and inexpensive compared to other interventions.

7. Most Ugandans do not have easy access to a hospital or a Health Centre-IV facility. While most HIVrelated services are available at hospitals and HC-IVs, few are available at HC-IIIs and HC-IIs, the facilities most Ugandans visit. More efforts must be made to prepare lower level facilities with the basic tools need to test for HIV, treat basic opportunistic infections and STIs, and provide basic care and support services.

