Uganda Health Facilities Survey 2002

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2002

Ministry of Health
Kampala, Uganda

ORC Macro
MEASURE *DHS*+
Calverton, Maryland, USA

John Snow, Inc./DELIVER
Arlington, Virginia, USA

JSI Research & Training Institute, Inc./
Uganda AIDS/HIV Integrated Model District Programme (AIM)
Kampala, Uganda

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Contributors:

John Snow, Inc./DELIVER
Dana Aronovich
Allison Farnum Cochran
Erika Ronnow

ORC Macro
Gregory Pappas

JSI Research and Training Institute, Inc./AIM
Evas Kansiime
Maurice Adams

Ministry of Health
F. G. Omaswa
H. Kyabaggu
Eddie Mukooyo
Martin O. Oteba

This report presents findings from the 2002 Uganda Health Facilities Survey (UHFS 2002) carried out by the Uganda Ministry of Health. ORC Macro (MEASURE *DHS+*) and John Snow, Inc. (DELIVER) provided technical assistance. Other organizations contributing to the project were the U.S. Centers for Disease Control and Prevention (CDC/Uganda), the U.S. Agency for International Development (USAID/Uganda), and the JSI Research and Training Institute, Inc., AIDS/HIV Integrated Model District Programme (AIM).

MEASURE *DHS+*, a USAID-funded project, assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Information about the Uganda Health Facilities Survey or about the MEASURE *DHS+* project can be obtained by contacting: MEASURE *DHS+*, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone 301-572-0200; Fax 301-572-0999; E-mail reports@orcmacro.com; Internet: www.measuredhs.com).

DELIVER, a worldwide technical assistance support project, is funded by the Commodities Security and Logistics Division (CSL) of the Office of Population and Reproductive Health of the Bureau for Global Health (GH) of the U.S. Agency for International Development (USAID). Implemented by John Snow, Inc. (JSI), (contract no. HRN-C-00-00-00010-00), and subcontractors (Manoff Group, Program for Appropriate Technology in Health [PATH], Social Sectors Development Strategies, Inc., and Synaxis, Inc.), DELIVER strengthens the supply chains of health and family planning programs in developing countries to ensure the availability of critical health products for customers. DELIVER also provides technical support to USAID's central contraceptive procurement and management, and analysis of USAID's central commodity management information system (NEWVERN). Additional information about DELIVER can be obtained by contacting: DELIVER, John Snow, Inc., 1616 North Fort Myer Drive, 11th Floor, Arlington, VA 22209 (Telephone 703-528-7474; Fax 703-528-7480; E-mail deliver_info@jsi.com; Internet: deliver.jsi.com).

AIM, the Uganda AIDS/HIV Integrated Model District Programme, is a five-year initiative jointly funded by the U.S. Agency for International Development (USAID) and the Centers for Disease Control and Prevention (CDC). The Programme was devised in consultation with the Ministry of Health, the Uganda AIDS Commission, international agencies, non-governmental organizations (NGOs), community-based organizations (CBOs), and those affected by HIV/AIDS. JSI Research and Training Institute and its partners, World Education and World Learning, are carrying out the AIM Programme in Uganda, working with organizations and individuals to increase the provision of HIV/AIDS services at the district and sub-district level resulting in broader access to quality HIV/AIDS prevention, care and support services. Additional information about the AIM Programme in Uganda can be obtained by contacting: Uganda AIDS/HIV Integrated Model District Programme, Nakawa House, 1st Floor, Plot 3-7 Port Bell RD, Kampala, Uganda (Telephone 041-222-011).

The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

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Preface

Access and quality of health care in Uganda continue as major challenges to the Ministry of Health and its partners working to improve the health of the population. Physical access to health facilities varies enormously, and rural communities are particularly affected. There are variations in access to health care both within and between districts. In addition, the HIV/AIDS epidemic has placed new demands on the health care delivery system and Uganda has responded rapidly and effectively to address this crisis.

The Ministry of Health of Uganda conducted a national survey of health facilities to evaluate HIV/AIDS-related services in the country. The Uganda Health Facilities Survey 2002 is a nationally representative survey of government and non-government health facilities throughout Uganda. This report describes the objectives, methods, results, conclusions, and recommendations of this survey.

The survey evaluated health commodity management and the performance of the national logistics system for health commodities. This report includes results on the status of health commodity availability in the country as they relate to HIV/AIDS, sexually transmitted infections, opportunistic infections, family planning, and infection control. A chapter presents findings on commodity management, stock availability and stock status, inventory management, information systems, training, supervision, and other logistics system functions.

HIV/AIDS-related services have also been evaluated, including the availability of prevention, care and support services, laboratory capacity, infection control, and infectious waste (including sharps) management in health care facilities. Data was collected on types of services, frequency of service availability, staff training related to services, and infrastructure (infection control, protocols, laboratory capacity) relevant to providing good quality services for HIV/AIDS.

The report attempts to bring together various findings in the study by creating composite indicators that include a measure of service availability, staff training, and availability of commodities and equipment in HIV/AIDS and related service areas. A chapter in the report uses a set of evaluation criteria for HIV/AIDS services including voluntary counseling and testing, prevention of mother-to-child transmission, management of opportunistic infections, treatment of sexually transmitted infections, and diagnosis and treatment of tuberculosis.

The assessment will help the Ministry of Health and other stakeholders in Uganda to identify strengths and weaknesses of the Ugandan health care system. The results provide information for planning interventions and baseline data for future evaluation.

Acknowledgements

This report is the result of a collaborative effort between the Ugandan Ministry of Health, the U.S. Agency for International Development (USAID)/Uganda, the Centers for Disease Control and Prevention (CDC)/Uganda, John Snow, Inc. (JSI)/DELIVER project, JSI Research and Training Institute (JSI R&T)/AIM project, and ORC Macro.

We would like to express our sincere appreciation to the numerous people that contributed to the completion and success of this survey and report. In particular, we would like express our gratitude to Dr. Martin Oteba and Dr. Eddie Mukooyo for their leadership and guidance in carrying out this survey and for their assistance with the coordination of the fieldwork. We would also like to thank all of the dedicated Ministry of Health staff that contributed to making the data collection run smoothly as well as the enthusiastic data collectors who worked tirelessly to complete the survey at sites around the country. We would particularly like to thank district administrators and technical staff, including the many health facility workers who graciously opened their doors to our survey teams and took the time to answer the survey questions openly and honestly.

We are also grateful to USAID and CDC for their financial support of this survey. For their contributions in the conception, design, and ongoing support of this survey, we would like to thank Elise Ayers, Suzzane McQueen, and Dr. Jessica Kafuko of USAID/Uganda, and Dr. Rebecca Bunnell and Dr. Donna Kabatesi of CDC/Uganda. We would also like to thank Ray Ransom and the data entry team at CDC/Uganda for their tremendous and tireless efforts in designing data entry screens, completing the data entry for the entire survey, and carrying out preliminary analysis of the data. Keith Purvis of ORC Macro carried out the tabulation of the data and the documentation of the data set.

In the area of planning and implementation of the fieldwork, we would like to thank Steve Wilbur, JSI/DELIVER Resident Logistics Advisor to Uganda, Dr. Maurice Adams, Chief of Party for the AIM project, and Hanif Nazerali, UHSSP Technical Advisor. We would also like to thank the entire staff at AIM, especially Evas Kansiime, Monitoring and Evaluation Advisor, whose technical and administrative support was invaluable to the success of the survey.

For her extensive work in the design of the survey instrument, we would like to thank Dr. Nancy Fronczak of ORC Macro. Also from ORC Macro, Dr. Sidney Moore edited the final report, Noah Bartlett assisted in the design of the figures, and Katherine Senzee designed the report and prepared the document for publication.

Finally, we would like to express our appreciation to those who thoughtfully reviewed this report. This includes Timothy Williams, Edward Wilson, and Rebecca Copeland of John Snow, Inc., and Dr. Nancy Fronczak and Dr. Sidney Moore of ORC Macro.

Dana Aronovich, John Snow, Inc./DELIVER
Allison Farnum Cochran, John Snow, Inc./DELIVER
Erika Ronnow, John Snow, Inc./DELIVER
Gregory Pappas, ORC Macro

List of Acronyms

ACP	AIDS Control Programme
AHSPR	Annual Health Sector Performance Report, Financial Year 2000/2001 (September 2001)
AIDS	acquired immune deficiency syndrome
AIM	AIDS/HIV Integrated Model District Programme
ARV	anti-retroviral drugs
CBO	community-based organizations
CDC	Centers for Disease Control and Prevention
CMS	Commercial Market Strategies project
DANIDA	Danish International Development Agency
DFID	British Department for International Development
DHS	Demographic and Health Surveys
DOTS	directly observed treatment, short-course (for tuberculosis)
ED	essential drugs
EDL	essential drug list
FEFO	first-to-expire, first-out
FP	family planning
FPAU	Family Planning Association of Uganda
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GoU	Government of Uganda
HBC	home-based care
HC II	Health Center Grade II
HC III	Health Center Grade III
HC IV	Health Center Grade IV
HIV	human immunodeficiency virus
HLD	high-level disinfection
HMIS	health management information system
HSD	health sub-district
HSSP	Health Sector Strategic Plan 2000/01–2004/5 (Uganda Ministry of Health)
IDA	International Development Association
IGP	income-generating projects
IPPF	International Planned Parenthood Federation
JMS	Joint Medical Stores
JSI	John Snow, Inc.
KfW	Kreditanstalt für Wiederaufbau (German Bank for Reconstruction and Development)
KPI	Kampala Pharmaceutical Industries, Ltd.
LIAT	Logistics Indicators Assessment Tool
LMIS	logistics management information system
MACA	Multi-sectoral Approach to the Control of HIV/AIDS
MAP	Multi-Country HIV/AIDS Program
MCH	maternal and child health
MoH	Ministry of Health
MSI	Marie Stopes International
NCPA	National Committee for the Prevention of AIDS
NDA	National Drug Authority

NDP	National Drug Policy
NEWVERN	USAID's central commodity management information system
NGOs	non-governmental organization
NMS	National Medical Stores
OI	opportunistic infection
OVC	orphans and vulnerable children
PHC	primary health care
PLHA	people living with HIV/AIDS
PMTCT	prevention of mother-to-child transmission
RH	reproductive health
SDP	service delivery point
SP	sulfadoxine/pyrimethamine
SPA	Service Provision Assessment
STI	sexually transmitted infection
SWAp	Sector-Wide Approach
TB	tuberculosis
TG/CWG	Technical Guidance and Competence Working Group
UAC	Uganda AIDS Commission
UAPC	Uganda HIV/AIDS Control Project
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNEPI	Ugandan National Expanded Program for Immunization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNMHCP	Uganda National Minimum Health Care Package
USAID	United States Agency for International Development
VCT	voluntary counseling and testing
WB	World Bank

Summary of Findings

Introduction

In recent years, Uganda has been cited as a model throughout the world for its rapid and effective response to addressing the HIV/AIDS epidemic. Prevalence rates have reportedly fallen in Uganda. This is frequently credited to the government providing direct and open information and leadership in curbing the epidemic, a delay in sexual debut and an increase in condom use, particularly with non-regular sexual partners (Uganda Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Infections, 2002 Update, UNAIDS, UNICEF, WHO).

To continue these successes, comprehensive HIV/AIDS prevention, care, and support services are critical. This includes services ranging from testing and counseling; to diagnosis and treatment of sexually transmitted infections (STI), tuberculosis (TB) and other opportunistic infections (OI); to treatment with anti-retroviral therapy; to a range of social and community-based support services. Because of Uganda's successes, international donor funding has increased in recent years to support the expansion of services and for procurement of the health commodities required to offer comprehensive HIV/AIDS services.

The Ministry of Health (MoH) of Uganda conducted the Uganda Health Facilities Survey (UHFS) in June 2002 to evaluate the current availability of HIV/AIDS support services and the health commodities required to offer these services, in addition to assessing the performance of the logistics system, laboratory services, and infection control and waste management procedures. The U.S. Agency for International Development (USAID) and the U.S. Centers for Disease Control and Prevention (CDC) provided financial assistance for the survey. Technical assistance was provided by John Snow, Inc./DELIVER, JSI Research and Training Institute, Inc./AIDS/HIV Integrated Model District Programme (AIM), CDC/Uganda, and ORC Macro/MEASURE *DHS*+.

The general objectives of the survey were as follows:

- Provide the MoH with current information on logistics system performance and stock status of key health commodities prior to the introduction of the new "pull" request and distribution system for the health commodities.
- Provide the MoH with current information on the availability of HIV/AIDS prevention, care, and support services, including other STIs, TB, and other OIs.
- Provide the MoH with information on the training of staff who manage and/or provide these services.
- Provide a baseline to measure the improvements in the logistics system for health commodities from USAID's support to the MoH through the DELIVER project and other USAID projects.
- Provide a baseline for measuring the improvements in HIV/AIDS support services from USAID and CDC support to the MoH through the AIM program.

A nationally representative sample of 238 health care facilities was selected from the 2000 Inventory of Health Institutions in Uganda. Facilities at all levels were selected from both the public and private sectors. Twelve government warehouses were also included in this study. The study used a questionnaire to survey clinic managers, clinic staff, laboratory staff, and logistics managers, and to observe clinic infrastructure, laboratory equipment, and availability of commodities. This document presents a summary of the key findings, conclusions, and recommendations from the survey. The final report contains more extensive details about the survey and the findings.

This survey will provide the MoH, USAID and its partners and other stakeholders in Uganda with information on the characteristics and the performance (strengths and weaknesses) of the logistics system and service delivery at all levels of health care in the country. The results will provide information for planning interventions that address problem areas and will provide baseline data, allowing the MoH to monitor progress over time, in order to adjust strategies as appropriate.

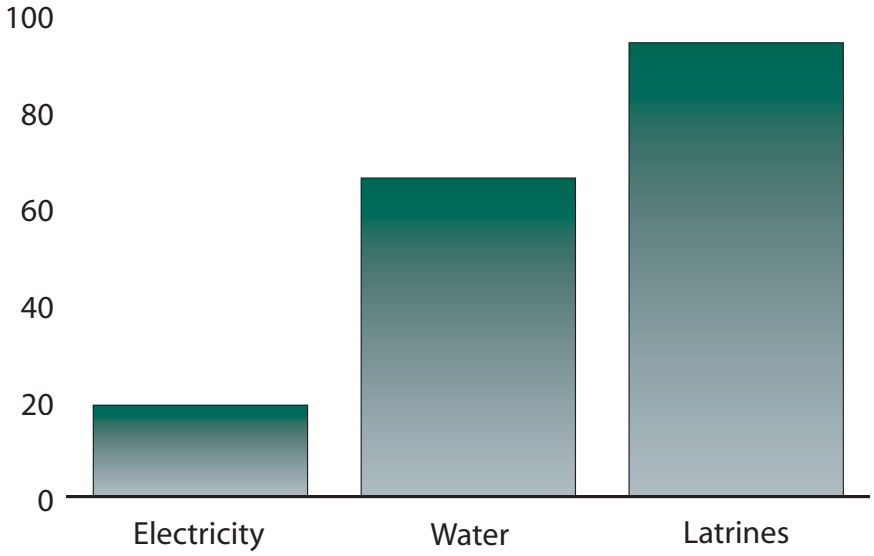
Note: The indicators for evaluation of health services used in this report evaluate the systems and cannot be used as a replacement for certification or needs assessment of particular facilities.

Physical infrastructure

Availability of electricity, an on-site water source, and functional latrines are basic components of physical infrastructure that support infection control at clinical facilities. Figure 1 shows the percentage of all health care facilities in the country (government and non-government facilities) that have electricity from any source, any on-site water source, and latrines.

Almost 20 percent of facilities have electricity, which is important for operating some disinfecting and sterilization equipment. However, 66 percent of facilities have an on-site water source. The majority of facilities have latrines available (over 90%).

Figure 1
Physical infrastructure of health care facilities: Percentage of clinical facilities with electricity, water source, and latrines



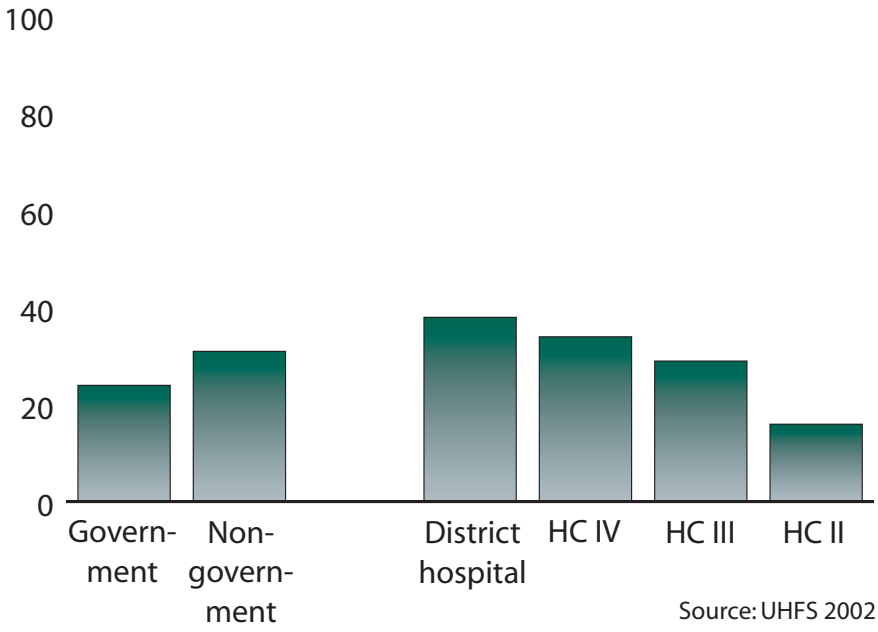
Note: Based on observation at time of survey

Source: UHFS 2002

Electricity is available in less than 20 percent of health facilities in the country.

Infection control

Figure 2
Percentage of clinical facilities that have soap, water for hand washing, disposable syringes, sharps boxes, disinfectant, and sterilization or HLD capacity, by ownership and type of facility



Source: UHFS 2002

Note: Based on observation or reports at time of survey

"Universal precautions" for infection control at all facilities is the goal of the Ministry of Health of Uganda. This survey has assessed a subset of "universal precautions" that includes availability of soap and water for hand washing, disposable syringes and sharps containers, disinfectant soaking of contaminated equipment, and a final process of sterilization or high level disinfecting (HLD) procedures (dry heat, autoclave, steam, boiling, or chemical). These items had to be either observed or reported at the facility at the time of the survey. Only 26 percent of clinical facilities in the country met all of the criteria.

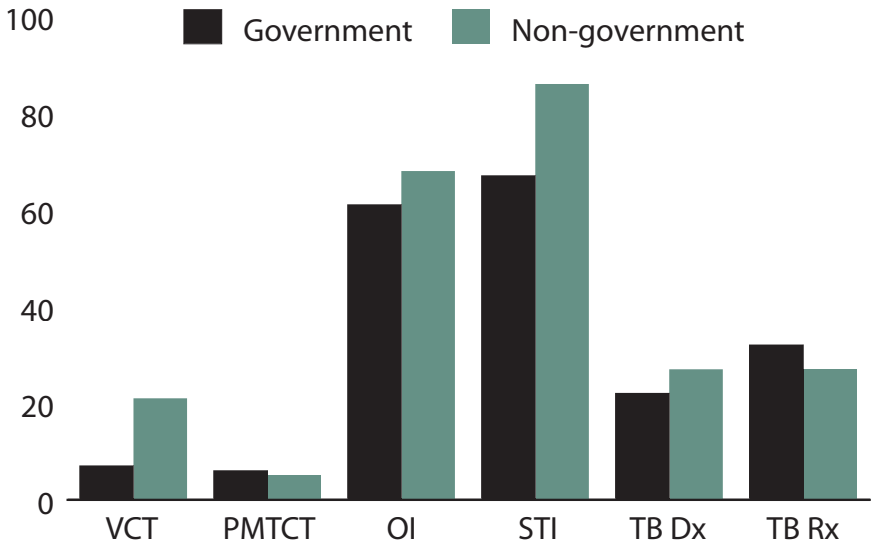
Figure 2 shows the proportion of facilities that have infection control in place (according to the definition), by ownership and type of facility. Less than 40 percent of hospitals have infection control provisions in place. Non-government facilities are more likely than government facilities to have infection control in place (31% and 24%, respectively). The most common reason that facilities do not meet the infection control criteria is that sharps containers were not available (51% of facilities).

Sharps containers were not available in 51 percent of facilities.

HIV/AIDS services

Figure 3 shows the proportion of facilities that reported offering services related to HIV/AIDS according to ownership (government versus non-government). These results do not describe the quality of services, only the reported availability of services at each facility. The survey asked about the availability of voluntary counseling and testing (VCT) services, prevention of mother-to-child transmission (PMTCT) services, management of opportunistic infections (OIs), treatment of sexually transmitted infections (STIs), and diagnosis and treatment of tuberculosis (in separate bars). The survey also evaluated other HIV/AIDS support services not shown here.

Figure 3
Percentage of clinical facilities reporting HIV/AIDS services, by ownership



Note: As reported by facilities

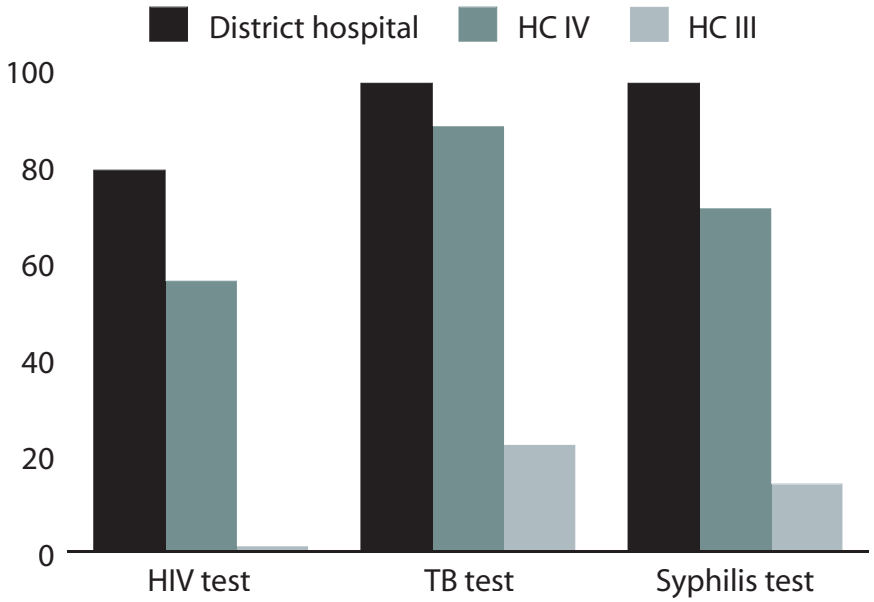
Source: UHFS 2002

Only 7 percent of government facilities reported offering VCT services compared with 21 percent of non-government facilities. Very few facilities reported offering PMTCT. OI and STI services were more readily available than the other services. Sixty percent of government hospitals and clinics reported managing OIs, and a slightly higher percentage of non-government hospitals and clinics. STI services were reportedly available at 67 percent of government and 85 percent of non-government clinics. Between 20 and 30 percent of the clinics reported offering diagnosis and treatment of TB.

The survey also investigated the components of each type of service, including outreach, partnerships, availability of guidelines, and existence of a register to record program information. More detailed findings on the availability of HIV/AIDS support services are available in the full report.

Government laboratory capacity

Figure 4
Percentage of government facilities with laboratory capacity to conduct HIV, TB, and syphilis tests, by type of facility



Note: As reported by facilities

Source: UHFS 2002

According to the 2000 MOH Inventory of Health Institutions in Uganda, all HC IIIs, HC IVs, and hospitals should have the capacity to provide laboratory services for HIV, TB, and syphilis testing. Although laboratory capacity was reviewed in the HC IIs visited, only a small number were found to offer laboratory services for these three diseases and were therefore excluded from the analysis. Among the facilities surveyed for the 2002 UHFS, only 27 percent of government facilities reported laboratory capacity to conduct any tests related to HIV/AIDS, TB, or STIs. Overall, laboratory capacity in government facilities was most frequently reported at district hospitals (97%), followed by HC IVs (88%); only 26 percent of HC IIIs reported laboratory capacity for testing.

Figure 4 shows the percentage of government facilities that reported having the capacity to conduct each of the specified tests by type of facility. Almost all of the district hospitals (97%) reported the ability to test for TB and syphilis, while at the HC IV level, 88 percent could test for TB and 71 percent could test for syphilis. The numbers are lower for HIV testing, with 79 percent of the district hospitals and 56 percent of the HC IVs reporting the ability to test for HIV.

Less than one-quarter of the HC IIIs could conduct any of these tests. It is important to note that, with syphilis, many practitioners at lower-level facilities rely on syndromic diagnosis. The current target of the MOH is for all facilities to have a functioning laboratory support system. At present, clients seeking laboratory services in the public sector will have to go to urban or semi-urban areas to receive a clinical diagnosis.

The 2002 UHFS also looked at specific indicators to measure laboratory capacity to diagnose HIV, TB, and STIs. These indicators are the following: a) trained laboratory personnel; b) laboratory equipment to conduct the tests including availability of at least one test kit and reagents, a functioning microscope, glass slides, and a functioning refrigerator, as appropriate; c) sufficient power source for refrigerator; and d) infection control items such as soap and water for hand washing, sharps container, disposable syringes, and waste receptacle with lid and liner. A maximum of two laboratory staff were interviewed at each facility to gather information on in-service training for conducting each of the tests. Detailed findings are available in the full report.

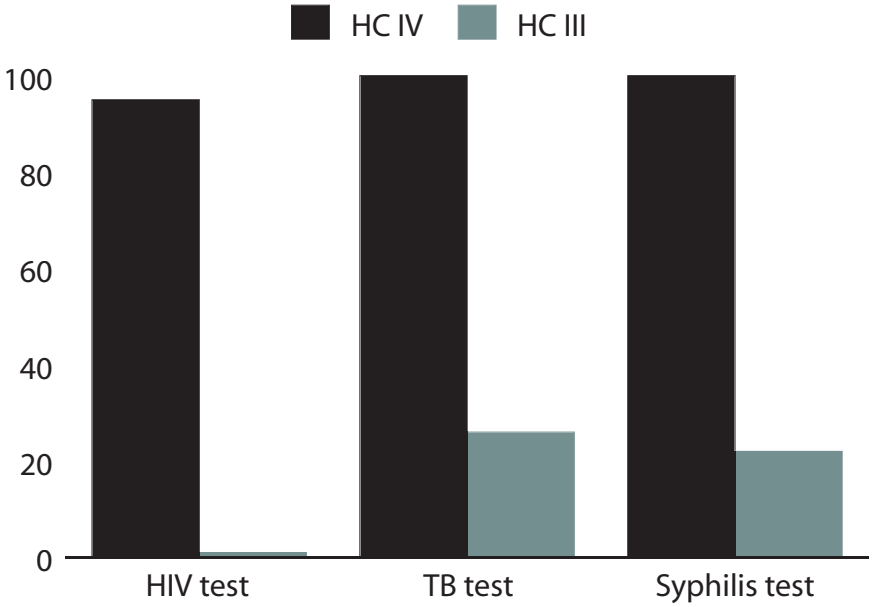
Non-government laboratory capacity

At non-government facilities, 100 percent of HC IVs and 31 percent of HC IIIs reported having the capacity to test for at least one of the three diseases (HIV, TB, and syphilis). Overall, 46 percent of all non-government facilities reported the capacity to test for at least one of the three diseases.

Figure 5 shows the percentage of non-government facilities that reported having the capacity to conduct HIV, TB, and syphilis testing. One hundred percent of the HC IV facilities reported that they could conduct a TB sputum test and a syphilis test. Ninety-five percent of HC IV facilities reported that they could test for HIV. Almost none of the HC IIIs reported the capacity to test for HIV; 26 percent could test for TB and 22 percent could test for syphilis.

The specific indicators used to measure laboratory capacity at non-government facilities can be found in the full report.

Figure 5
Percentage of non-government facilities with laboratory capacity to conduct HIV, TB, and syphilis tests, by type of facility



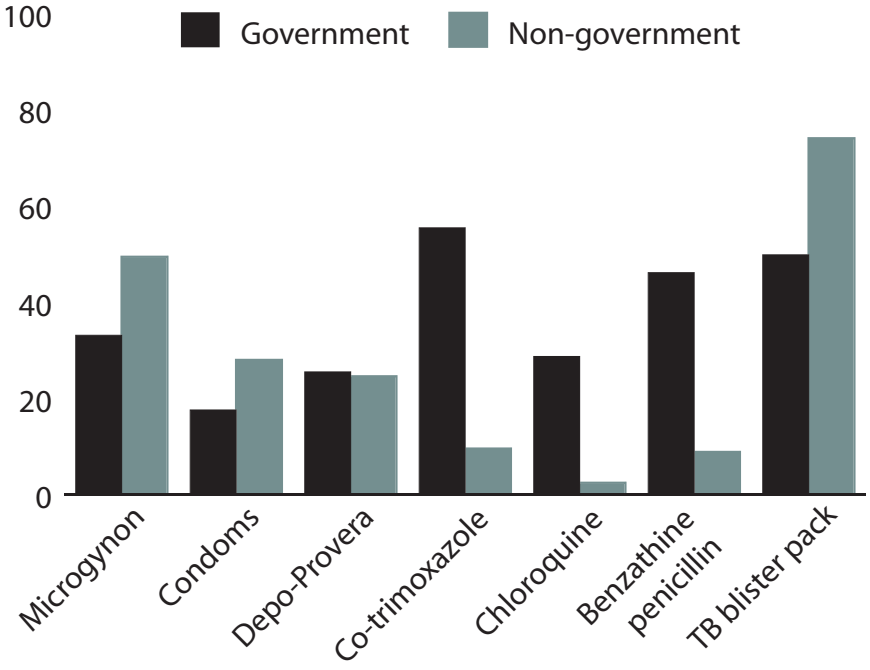
Note: As reported by facilities

Source: UHFS 2002

In government facilities, almost 80 percent of district hospitals and over half of HC IVs had laboratory capacity to test for HIV. In non-government facilities, 95 percent had laboratory capacity to test for HIV.

Stockout rates

Figure 6
Percentage of facilities at which specific commodities were not available sometime during December 1, 2001–May 31, 2002, by ownership



Note: Stockouts are defined as observed missing commodities on the day of the survey or a report of missing commodities during the specified period.

Source: UHFS 2002

Logistics managers at clinical facilities strive to ensure a consistent and reliable supply of the commodities required for delivery of health services. A key indicator used to measure whether a logistics system has achieved this goal is stockout rates or, the opposite, stock availability rates. For this analysis, a stockout occurs when a facility has no supply of a particular brand although there may be supplies of other brands that can be used for the same purpose. When facilities experience stockouts, they are unable to serve clients with a comprehensive range of health commodities or services.

At each facility visited for this survey, data collectors interviewed facility staff and reviewed stock records to collect information on stock availability on the day of the visit and for the six-month period preceding the survey (December 1, 2001 to May 31, 2002). A six-month period is reviewed to capture a more accurate picture of stock availability and to allow for seasonal trends in consumption (e.g., malarial drug use increases during the rainy season) and availability (e.g., periodic shipments of supplies).

Figure 6 shows the percentage of facilities that experienced at least one commodity stockout during the six-month period, among facilities that are supposed to manage the specified commodities. This is shown for all facility types combined (all levels, all districts), according to ownership.

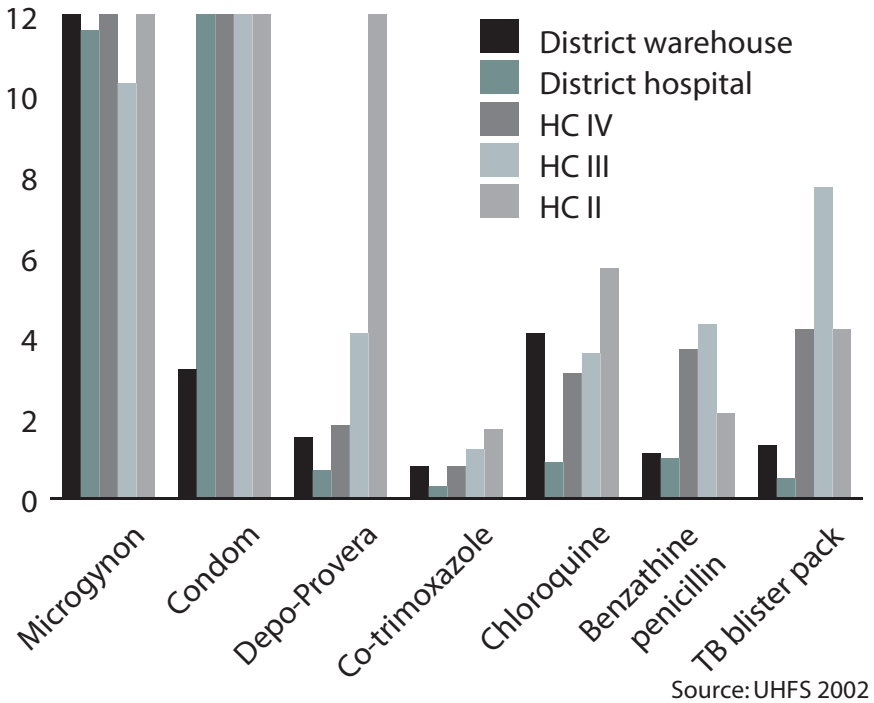
In the past six months, a larger proportion of facilities had a stockout of Microgynon than the other two contraceptive methods shown (condoms and Depo-Provera). Only about 20 percent of facilities experienced a stockout of condoms or Depo-Provera during this period. Over 50 percent of government facilities experienced a stockout of co-trimoxazole, 29 percent of chloroquine, 46 percent of benzathine penicillin, and 50 percent of TB blister packs. For Microgynon, condoms, and TB blister packs, non-government facilities were more likely to have stockouts than government facilities. For the essential drugs distributed (co-trimoxazole, chloroquine, and benzathine penicillin), government facilities were more likely to experience a stockout than non-government facilities. Contraceptive methods and TB drugs are supposed to be kept in full supply to meet the needs of all clients. All hospitals, HC IVs, and HC IIIs are supposed to have co-trimoxazole, chloroquine, and benzathine penicillin in stock. As can be seen in the figure, this is not happening in practice.

Stock status

Figure 7 shows the levels of stock available (average number of months of stock on hand) at each type of government facility for a selected number of commodities. An assessment of the stock status of health commodities is an important complement to stockout rates and offers an estimate of how long the commodities will be available. Reviewing stock status provides a more comprehensive picture of how commodities are being managed by the logistics system.

To ascertain whether stock levels of health commodities are adequate, the average number of months of stock on hand is calculated. To do this, data collectors must first calculate a rate for the average monthly consumption or issues of products. This rate is then compared with the physical inventory at each facility on the day of the visit to establish the number of months of stock available to be dispensed to clients or issued to other facilities. The indicator shows how many months the current stock will last to serve clients. It can also identify situations where commodities are overstocked, which can lead to commodity expiration and wastage, or understocked, which can lead to rationing of commodities or stockouts.

Figure 7
Average number of months of stock on hand (for specified health commodities) at government facilities on the day of the survey, by type of facility



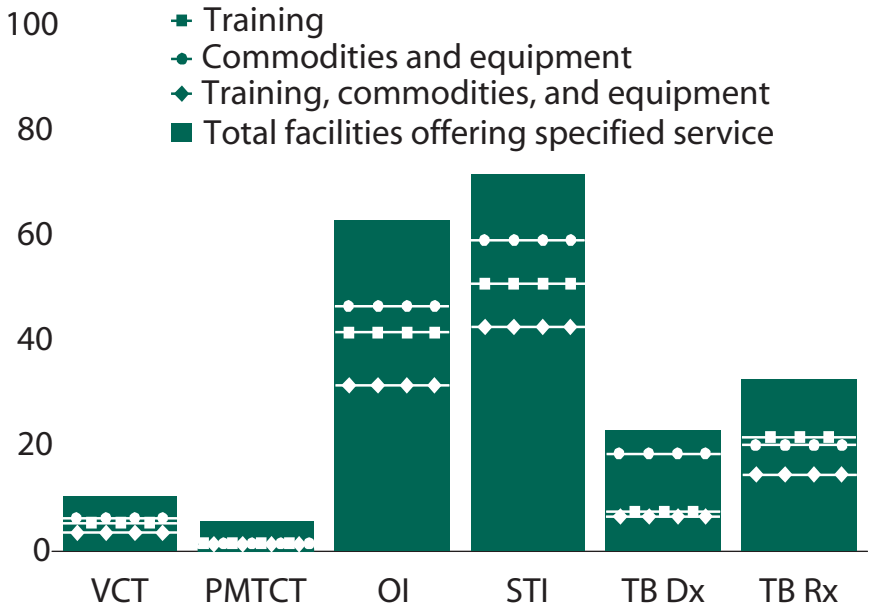
Source: UHFS 2002

Figure 7 shows the average number of months of stock on hand at each type of facility. Two of the contraceptive methods, Microgynon and condoms, were significantly overstocked on the day of the visit, with 12 months or more of stock at all of the facilities. For condoms, these high stock levels were likely due to a year's supply of condoms being distributed to facilities between March and July 2002, during the period the survey was being carried out. For most of the remaining commodities, the stock levels were low at the higher level facilities, such as warehouses, and high at the lower level facilities, where they need to be to serve clients. Most of these commodities were stocked according to the established inventory control levels, with the exception of co-trimoxazole, which was understocked at all levels, and TB blister packs, which were overstocked at the HC III level.

Stock levels were low at the higher-level facilities, such as warehouses, and high at the lower-level facilities, where they need to be to serve clients.

Evaluation criteria for HIV/AIDS services

Figure 8
Percentage of facilities offering specific HIV/AIDS services, and percentage meeting evaluation criteria for training, commodities, and equipment necessary to offer the services



Source: UHFS 2002

Quality health care must include a minimum level of commodities, appropriate equipment, and trained staff. The figure evaluates selected HIV/AIDS services at facilities in Uganda by applying a set of criteria created for this study. The services evaluated include voluntary testing and counseling (VCT), prevention of mother-to-child transmission (PMTCT), management of opportunistic infections (OI), treatment of sexually transmitted infections (STI), and tuberculosis diagnosis (TB Dx) and treatment (TB Rx). The evaluation criteria for offering each service, as defined here, include the presence of trained staff and the availability of the commodities and equipment necessary for offering each service.

Training is measured by the presence of a staff person working in each service area who has received in-service training in the past three years related to that service. For service areas where laboratory capacity is required (VCT, PMTCT, and TB diagnosis), the criteria require facilities to also have at least one laboratory staff person who has received in-service training in laboratory diagnosis using (where applicable) HIV test kits or TB sputum testing procedures in the last three years.

The criteria for commodities and equipment are defined for each service as follows:

- For VCT/PMTCT services, the facility had at least two HIV test kits available for use and a functioning refrigerator to store certain HIV test kits—with a sufficient and consistent power source—on the day of the visit.

- For STI and OI services, the facility had at least one dose of any of the drugs that the survey looked at for the treatment of STIs or OIs on the day of the visit. The STI drugs included ciprofloxacin (Cipro), benzathine penicillin, doxycycline, and metronidazole (Flagyl). The OI drugs included fluconazole (Diflucan), co-trimoxazole (Septrin), and acyclovir (Zovirax/Cyclovax).

- For TB diagnostic services, the facility had a functioning microscope and slides on the day of the visit.

- For TB treatment services, the facility had any stock of TB blister packs for the treatment of TB on the day of the visit.

Figure 8 shows the percentage of all health care facilities (government and non-government) visited that reported offering specific HIV/AIDS support services. Facility staff reported that OI and STI services are available at more than half the facilities. TB diagnosis and treatment are available at approximately one-third of the facilities, and VCT and PMTCT services are available at only a small proportion of the facilities. The lines on the bars show the actual availability of these services.

The lines with squares on the bars show the percentage of facilities that have a staff person trained to offer the specified service. The majority of facilities offering OI, STI, TB treatment, and VCT services have a staff person trained to offer the services, while less than half the facilities offering PMTCT and TB diagnosis have a staff person trained to offer those services.

The lines with circles show the percentage of facilities that have the commodities and equipment necessary to offer the specified service on the day of the survey. Fifty percent or more of the facilities that reported offering VCT, OI, STI, TB diagnosis, and TB treatment services also had the commodities and equipment needed to provide the service on the day of the visit. However, those that reported offering PMTCT services were usually lacking the commodities and equipment needed.

Finally, the lines with diamonds show the percentage of facilities that have both trained staff and the commodities and equipment needed to provide the specified service, i.e., the minimum requirements to offer the service. Without trained staff and the required commodities and/or laboratory equipment needed to provide the service, a facility is not, in fact, able to offer the service. Approximately half the facilities that reported offering OI, STI, and TB treatment meet the evaluation criteria of this study. Only a minority of the facilities offering other services meet the evaluation criteria.

Among all of the facilities, less than 5 percent can offer VCT with the training, commodities, and equipment criteria used here. Less than 35 percent can offer an OI service according to this definition. Among all the facilities in the country, less than half offer STI services that meet the evaluation criteria. TB diagnosis and treatment are offered at less than 20 percent of all facilities.

It is important to note that the criteria shown in the figure are very lenient. A stricter set of criteria could be applied to represent the actual availability of services.

Facility staff reported that OI and STI services are available at more than half the facilities. TB diagnosis and treatment are available at one-third of the facilities. VCT and PMTCT services are available at a small proportion of facilities.

Findings, conclusions, and recommendations

I. Service Provision

A. Findings

1. The Ministry of Health (MoH) has set a target that all health units provide HIV voluntary counseling and testing (VCT) services. Currently, about 11 percent of all facilities report that they provide VCT services. However, less than half these facilities have trained staff (received in-service training in the past three years) and equipment for services, i.e., at least two HIV test kits and a working refrigerator (4% of all facilities).

2. Effective management of STIs and opportunistic infections in all health units is another target of the MoH Strategic Plan. Currently, 72 percent of all facilities report that they provide STI services. Staff trained in syndromic management (received in-service training in the past three years) are present in 71 percent of facilities. Medication for at least one of the common STIs is available in only 82 percent of facilities. Both trained staff and commodities are available in only 60 percent of facilities. Similar findings were reported for OI management.

Universal precautions for infection control are not being followed in most health care facilities.

3. The report defined infection control as the presence of soap and water for hand washing, disposable syringes, ability to soak equipment in a disinfectant, and some method of high level disinfection (e.g., boiling). Less than half of all hospitals met these criteria, and only a few small facilities were found able to control infection according to this definition.

4. A national target for tuberculosis control is 100 percent national coverage with community DOTS. Currently in Uganda, 28 percent of facilities provide diagnosis of TB by trained personnel and have adequate laboratory facilities. Regarding treatment for tuberculosis, only 45 percent of facilities have trained personnel and any medication.

5. Capillus and Serocard were found to be the most commonly used HIV test kits. Capillus was used most often as the primary test. Use of the other six test kits studied was inconsistent.

B. Conclusions

1. The Health Sector Strategic Plan lays out a number of important goals for 2005. The 2002 Uganda Health Facilities Survey measures progress towards these goals. For the goals that can be evaluated by this study, it was found that most health facilities in Uganda are far from reaching the targets.

2. Training remains an important challenge, especially in areas of clinical care such as HIV that are changing rapidly. There is a need for in-service training in all areas of HIV, STI, and TB services.

It is thought that there are serious financial barriers to the purchase of medications and commodities in Uganda.

3. Availability of services is strong at the district level but weak at smaller facilities (HC II and III). New services such as VCT and PMTCT are available at very few of the smaller facilities. Even for long-standing programs like tuberculosis treatment and control, most small facilities do not provide services.

4. While this study provides a national picture of provision of care in the government and non-government health care delivery system, it does not examine the utilization of services. Commercial pharmacies provide medication, especially in towns, but were not covered in this study.

Access to medication through these pharmacies should improve the health care picture provided by this report. However, it is thought that there are serious financial barriers to the purchase of medications and commodities in Uganda.

5. Universal precautions for infection control are not being followed in most health care facilities.

C. Recommendations

1. ***Efforts to improve the quality of and access to care for deadly and highly prevalent infectious diseases such as syphilis and tuberculosis should receive the highest priority as the country moves toward development of the health system and health care reform.*** While efforts to extend PMTCT and anti-retroviral therapy to the entire population are important, deadly and debilitating diseases like syphilis and tuberculosis are endemic and under-treated in the country.

Deadly and debilitating diseases like syphilis and tuberculosis are endemic and under-treated in the country.

2. ***Policy guidelines for the provision of VCT and PMTCT services must be established.*** This includes the selection of HIV test kits and anti-retroviral drugs and the development of protocols for their distribution and management (with consideration for electricity and refrigeration limitations).

3. ***Laboratory capacity to manage and conduct the tests to support VCT and PMTCT services will also need to be improved.***

4. ***Service providers will need to be trained in the provision of VCT and PMTCT services, which involve new protocols, procedures, and skills.***

II. Health Commodity Management and Logistics System Performance

A. Findings

1. Less than 50 percent of Ugandan health facilities had stockouts of the commodities surveyed in the six-month period preceding the survey. However, at district hospitals, HC IVs, and HC IIIs, many of the stockouts were of long duration. Furthermore, many of the facilities that had stockouts during the survey period were not keeping their stock cards up to date, particularly regarding contraceptive methods. The most common reason given by facilities for the occurrence of stockouts was that a higher level facility did not send the commodities in time.

Some facilities are, to some degree, already assessing their commodity needs to place orders.

2. Microgynon and condoms were significantly overstocked at all levels. Co-trimoxazole, fluconazole, metronidazole, doxycycline (at all but HC IIs), and ciprofloxacin (at all but HC IIs) were understocked at all levels. TB blister packs were overstocked at the HC III level. Other commodities were stocked appropriately on the day of the survey, with lower stock levels at the higher level facilities and higher stock levels at the lower level facilities.

3. Although the majority of facilities reported using stock cards, a smaller percentage of facilities were actually found to be using the cards on the day of the survey.

4. Approximately one-quarter of the facilities place commodity orders about every two months, which is the same frequency as the new pull system protocol. These facilities are, to some de-

gree, already assessing their commodity needs to place orders.

5. In both government and nongovernment facilities, at all levels of the system except district warehouses and some district hospitals, health commodities are not routinely managed by staff trained in logistics. However, staff at higher levels of the logistics system are more likely to have received formal training in logistics management than staff at lower levels. Many staff learn to perform daily logistics tasks informally on the job.

6. Supervisory visits occur regularly and include limited monitoring of logistics tasks such as record keeping and stock management. Supervision is more routine at the lower levels of the health care system—the majority of HC IIs and HC IIIs received supervisory visits during the month preceding the survey.

B. Conclusions

1. The frequency of stockouts in the public sector is high, including full-supply products. These stockouts include critical drugs required for contraception and disease prevention and to treat STIs, TB, and other infectious diseases.

Stockouts are reported most frequently because a higher-level facility did not send the commodities in time.

2. Commodity availability in the public sector is inconsistent and insufficient. The data on levels of stock on hand show that inventory management practices have led to over- and understocked facilities. This can lead to stockouts and product wastage through expiration and the inability of facilities to meet clients' needs.

Health commodities are not routinely managed by staff trained in logistics.

3. Health commodity security is additionally threatened by inadequate record keeping and information systems.

4. The district warehouses do not maintain large quantities of health commodities in stock and serve primarily as pass-through points from the National Medical Stores (NMS) at the central level to the storerooms at the health sub-districts (HSD).

5. Performance improvement interventions in logistics management are needed to ensure a smooth transition to a pull system. In light of the rapidly changing MoH logistics system, the information and processes taught to these staff may be inconsistent or outdated, particularly for ordering and inventory management.

C. Recommendations

1. ***Improve product availability by collecting key logistics data through the health management information system (HMIS).*** Information at the facility level is needed to evaluate and justify the orders placed. To ensure that the logistics data needed to make forecasting, ordering, and procurement decisions are collected through the existing information system, the commodity order forms should be redesigned to include stock on hand at the facility level. (Note: since the survey was conducted, the order forms have been reworked, in part due to the preliminary findings from this survey.)

2. ***Analyze data collected through the HMIS and use data for decisionmaking at the central level (e.g., for forecasting and procurement).*** At present, the data are not systematically collected and analyzed at the central level. As NMS takes over forecasting and procurement functions for health commodities, they will need logistics data to forecast future needs. The MoH will also need this information for budgeting purposes.

3. ***Establish protocols for transferring overstocked commodities and***

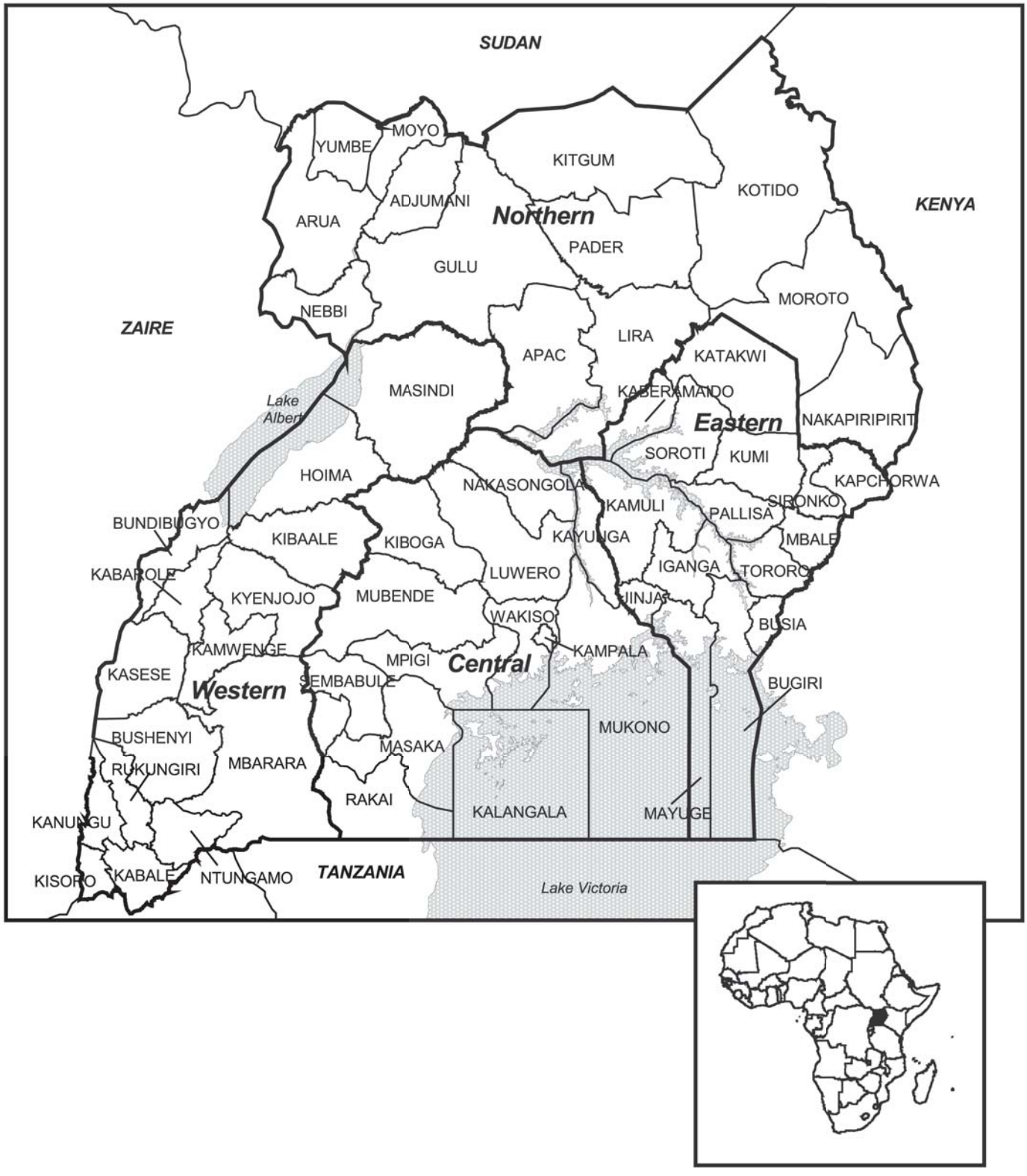
disposing of expired products. A preliminary recommendation of the survey was to schedule a national "dejunking" of warehouses and health centers. This has been scheduled for 2003. Protocols should be established to create a mechanism for facilities to transfer stocks between facilities to avoid stock imbalances.

4. ***Decentralize the transportation of health commodities.*** NMS and the MoH should investigate the cost-benefit of delivering supplies directly to the HSD level, rotating through districts every two months. (Note: Since the survey was conducted, DELIVER carried out a cost study in December 2002 to evaluate this option. Detailed findings are available from DELIVER.)

5. ***Establish a human resources plan to identify staff needs and funding to meet these needs.*** Staff shortages have affected product availability, reporting, and overall logistics system performance.

6. ***Create a performance improvement plan of action for logistics management to ensure commodity security and quality of care.*** This activity can be implemented largely through on-the-job training and during supervision visits by reinforcing good commodity management practices. The plan should include an added emphasis on monitoring and evaluation of logistics activities and system performance. Supervisory visits should be used as a cost-effective means of reinforcing skills and for on-the-job training of staff. Because routine supervision is already taking place, it can be used as a tool for monitoring logistics system performance in order to resolve problems quickly and for performance improvement interventions for staff.

UGANDA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RUKUNGIRI
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RAKAI
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Chapter 1

Introduction

This report outlines the design, implementation, findings, conclusions, and recommendations of the Uganda Health Facilities Survey conducted in June 2002. This survey and report are a result of collaborative efforts of the Uganda Ministry of Health (MoH), the U.S. Centers for Disease Control and Prevention (CDC)/Uganda, the U.S. Agency for International Development (USAID)/Uganda, John Snow, Inc.'s DELIVER Project, JSI Research and Training Institute, Inc.'s AIDS/HIV Integrated Model District Programme (AIM), and ORC Macro's MEASURE *DHS*+ Project. Further description of each partner can be found in Appendix H.

This introductory chapter provides background information on the health care delivery system in Uganda. This background includes:

- Structure of the health care delivery system
- Public health commodity logistics system
- National Strategic Framework for HIV/AIDS
- Health Sector Strategic Plan

1.1 Structure of the health care delivery system

The Government of Uganda (GoU) and the MoH are currently implementing changes to their health care delivery system to reduce morbidity and mortality from major health problems. Most significantly, they are in the process of decentralizing financial and decision-making authority for the provision of basic health services. This includes many logistics functions and control over medical personnel from the MoH to the districts, health sub-districts (HSD), and service delivery points (SDP) throughout the country.

The Constitution and Local Government Act of 1997 allocated the responsibility and authority for delivery of health services to the level of the district and other local authority entities such as municipalities. Since that time, the MoH has been downsized and restructured. As part of the reform process in government, the MoH introduced a Sector Wide Approach (SWAp) as the guiding principle in health planning and resource mobilization. The purpose of SWAp is to provide much-needed funds to the MoH while developing MoH capacity in making procurement decisions based on their priorities. Planning and management of health services is now being done by the MoH together with districts, other government ministries and development partners.

The MoH Health Sector Strategic Plan (HSSP) 2000/01–2004/5 was launched in August 2000. During the first year of the HSSP, the emphasis was to establish policies, structures, and systems for implementing activities in the HSSP. The recent Annual Health Sector Performance Report (AHSPR) (September 2001) indicates that this has been achieved. The same report also states that the health sector is under-funded, operating with less than half of the required funds to deliver the Uganda National Minimum Health Care Package (UNMHCP), a set of technical health care programs that are "considered to have a high impact on reducing morbidity and mortality from the major contributors to the disease burden using existing resources."

According to the MoH Inventory of Health Institutions in Uganda (March 2000) and the HSSP, national health service outlets include 1,738 facilities, of which 1,226 are government-managed, 465 are

managed by non-governmental organizations (NGO), and 47 are private. The facilities include 104 hospitals (57 government, 44 NGO and 3 private), 250 health centers (179 government, 68 NGO and 3 private), 2 palliative care facilities (1 government, 1 NGO), and 1,382 others[1] (989 government, 352 NGO and 41 private).

The health centers throughout the country are categorized as Health Center II, Health Center III, and Health Center IV. Each facility category depends on the administrative zone served (i.e., parish, sub-county, and health sub-district) and the different types of services they provide.

A Health Center Grade II (HC II) serves a parish with a population of approximately 5,000 people. It provides outpatient care, antenatal care, immunization, and outreach. An HC II is supposed to be staffed by one enrolled nurse, one enrolled midwife, and two nursing assistants. According to the HSSP, all HC IIs provide community-based preventive and promotive health service.

A Health Center Grade III (HC III) serves a sub-county with a population of approximately 20,000 people. It provides all the services of an HC II plus inpatient care and environmental health. It is usually staffed by one clinical officer, one enrolled nurse, two enrolled midwives and one nursing assistant, one health assistant, one laboratory assistant, and a records officer. According to the HSSP, all HC IIIs provide the services offered in an HC II plus maternity services, inpatient health services, and laboratory services.

A Health Center Grade IV (HC IV) serves a health sub-district with a population of approximately 100,000 people. It is the headquarters unit of the health sub-district. It provides all the services of an HC III, plus surgery, supervision of the lower-level units, collection and analysis of data on health, and development of plans for the health sub-district. Each HC IV should have at least one medical officer, two clinical officers, one registered midwife, one enrolled nurse, one enrolled midwife, one registered comprehensive nurse, two nursing assistants, one laboratory technician, one laboratory assistant, one health inspector, one dispenser, one public health dental assistant, one anesthetic officer, one assistant health educator, one records assistant, one accounts assistant, and two support staff. The HSSP calls for all HC IVs to provide emergency surgery and blood transfusion services as well as all the services offered at HC IIIs.

Government hospitals are divided into three categories: national referral, regional referral, and district/rural/general hospitals. District/rural/general hospitals are staffed with general doctors. The goal for 2005 outlined in the HSSP lists services to be provided as all services offered at the HC IV level plus in-service training, consultation, and research for community-based health care programs. Regional referral hospitals have specialists in a limited number of fields and are also teaching hospitals. The HSSP states that they will offer services as described for the general hospital plus specialist services in psychiatry, ear, nose, and throat (ENT), ophthalmology, dentistry, intensive care, radiology, pathology, and higher level surgical and medical services. Finally, there are two national referral hospitals located in Kampala district. These are also teaching/research hospitals and provide comprehensive specialist services.

1.2 Public health commodity logistics system

To ensure that the Uganda National Minimum Health Care Package (UNMHCP) can be provided throughout the health care delivery system, it is essential to have health commodities available at all levels of the system. Currently, in Uganda, procurement of health commodities is carried out through private vendors, donors, and faith-based organizations. This process begins with arrival at the port of entry (Entebbe or by train from Mombasa) where the consignments are approved by the National Drug Authority (see Section 3.1.1 for further discussion on inputs according to commodity type). The approval time for

[1] Others includes dispensaries, maternity units, sub-dispensaries, and dispensary-maternity units.

consignments that enter the country varies from one day to one month (Raja, Wilbur, Blackburn, 2000). For the public sector supplies, the commodities are then moved to the National Medical Stores (NMS) in Entebbe. Various vertical programs utilize the NMS to pack and deliver commodities to the district warehouses (N=56). The district warehouses are responsible for delivering to the health sub-district (N=214). Individual service delivery facilities (N=1,226) then collect their supplies from the health sub-district store that is commonly housed in the sub-district hospital. The flowchart in Figure 1.1 illustrates the flow of commodities and the number of levels that exist in the supply chain for public health commodities. This chart also shows the large number of parallel supply chains that currently exist. Further discussion of the logistics system can be found in Chapter 3.

1.3 National Strategic Framework for HIV/AIDS

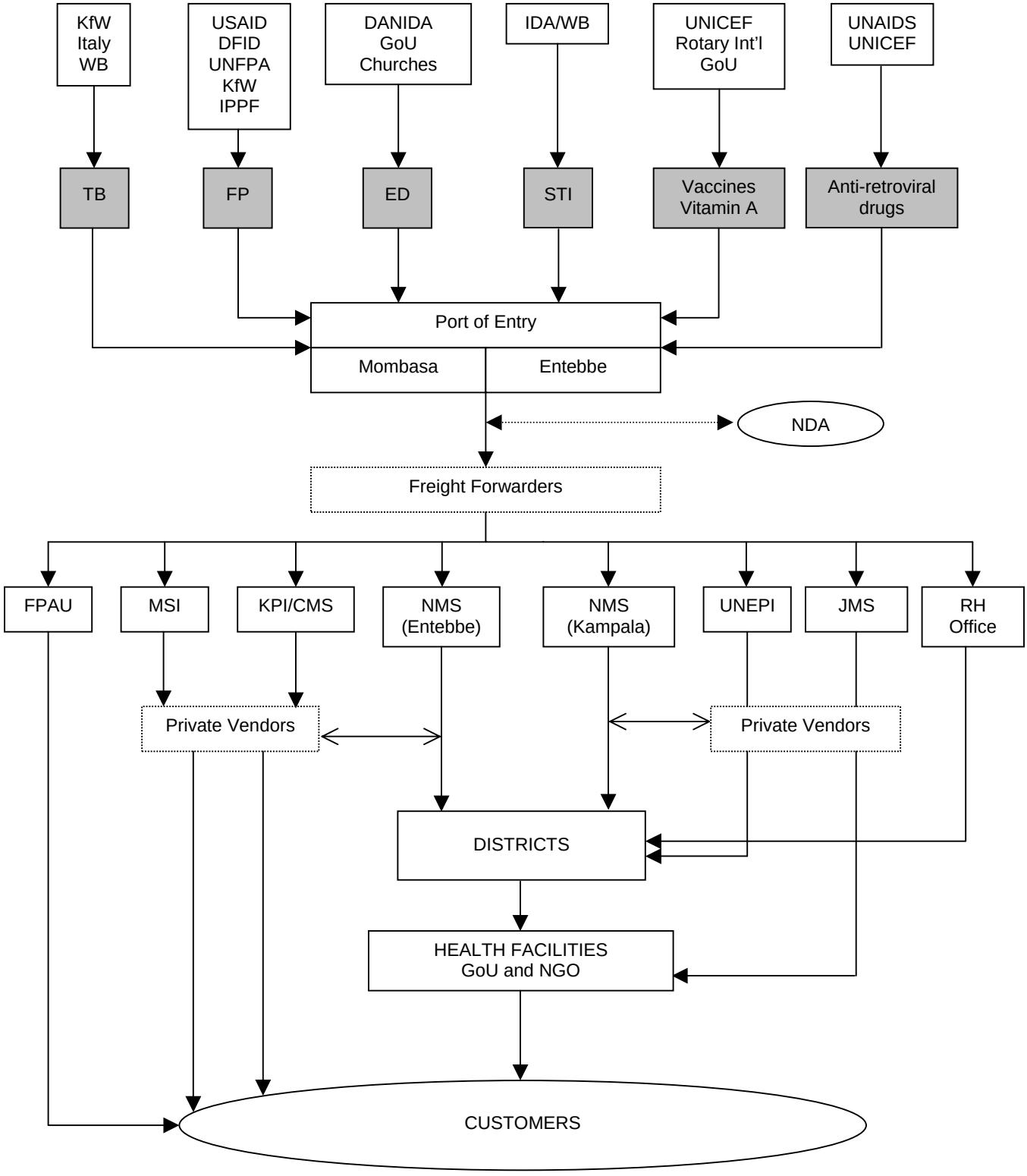
Uganda has made important progress in creating awareness of HIV/AIDS, promoting testing, and facilitating care for those infected. However, more needs to be done to further reduce HIV infection and mitigate the socio-economic impact of the epidemic at individual, household, and community levels. This section provides a context for the findings of this report by providing a history of the HIV/AIDS planning and health care services in Uganda.

Various sectors and line ministries have played an important role in HIV/AIDS prevention and care and in mitigating the socioeconomic impact of HIV/AIDS during the last decade. The National Strategic Framework recognizes that HIV/AIDS should be integrated into all aspects of development work, service provision, planning, and implementation by line ministries, local governments, religious and cultural organizations, the private sector and NGOs/CBOs (community-based organizations). The framework is the national guideline and source of inspiration for sector-wide HIV/AIDS planning and implementation and emphasizes collaboration and co-ordination among all stakeholders working towards HIV/AIDS prevention and care. Openness, political support, and commitment at the highest level of government have characterized the national response to the epidemic.

The first response of the GoU was the establishment of the National Committee for the Prevention of AIDS (NCPA) in 1985. In October 1986, the AIDS Control Programme (ACP) was established in the MoH. This report provides information on activities and services that are under the responsibility of the ACP and that are frequently based from health facilities. These include the provision of HIV/AIDS information, education and communication; provision of patient care and counseling; and prevention and control of other STIs.

In 1990/91, the government adopted a Multi-sectoral Approach to the Control of HIV/AIDS (MACA) for dealing with the epidemic. This approach emphasized the notion of collective responsibility of individuals, community groups, different levels of government and other agencies for the prevention of HIV infection. It also emphasized building and strengthening organizational capacity among government sectors and non-governmental organizations to sustain AIDS activities. The Uganda AIDS Commission was established in 1992 by an act of Parliament to address the HIV/AIDS problem in this broad context. The National Operational Plan for HIV/AIDS prevention, care, and support (1994–1998) was drawn up to provide guidance for agencies involved in HIV/AIDS-related work.

Figure 1.1 Public health commodity logistics system in Uganda



Source: Raja, Wilbur and Blackburn, *DELIVER Uganda Logistics Systems for Public Health Commodities: An Assessment Report*, May 2000.
Note: See pp. xv–xvi for explanation of acronyms.

The Strategic Framework for HIV/AIDS prevention and care for the 1998–2002 period has seven goals:

- Stop the spread of HIV infection;
- Mitigate the adverse health and socio-economic impact of the HIV/AIDS epidemic;
- Strengthen the national, district, and lower level capacity to respond to the HIV/AIDS epidemic;
- Establish the national information base on HIV/AIDS;
- Strengthen the national capacity to undertake research relevant to HIV/AIDS;
- Provide care, support, and protection of rights of PLHAs; and
- Reduce the vulnerability of individuals and communities to HIV/AIDS, with a focus on children, youth, and women.

Following a period of implementation, the current Strategic Framework was revised to minimize duplication of efforts, engender more focused interventions, and simplify monitoring and evaluation. The present document also places HIV/AIDS in the broader context of social and economic development.

The original seven goals were therefore regrouped as follows:

- Reduce the rate of HIV infection;
- Mitigate the health and socio-economic impacts of HIV/AIDS at individual, household and community levels; and
- Strengthen the national capacity to respond to the epidemic.

1.4 Health Sector Strategic Plan

Based on the Poverty Eradication Action Plan, health sector policy, and inputs from stakeholders and related ministries, the MoH developed the Health Sector Strategic Plan for 2000/1–2004/5 (HSSP). The goals and objectives outlined in the plan are intended to reduce morbidity and mortality in Uganda. The plan provides a framework for work planning, financing, and integrating the activities in the plan with related support services. Monitoring and evaluation of the plan will be conducted by the National Health Assembly and will track 45 input, process and output indicators. The plan outlines objectives, indicators, and means of verification in a logframe format in the areas of implementing the National Minimum Health Care Package, developing the health care delivery system, integrating support systems, calculating costs, securing financing, and implementing the plan itself.

Although the HSSP is a detailed and comprehensive plan for the entire health sector, this report highlights HIV/AIDS, STI, and tuberculosis (TB) services. The HSSP's overall objective for STI and HIV/AIDS is "to prevent and control STD/HIV/AIDS transmission and mitigate the personal effects of AIDS." The national targets associated with the STI/HIV/AIDS objective that are addressed by the results of this survey include the following:

- Providing HIV voluntary counseling and testing services in all health units (HC III and above);
- Providing effective management of STIs and opportunistic infections in all health units;
- Achieving 100 percent compliance with universal infection control procedures in all health units, public and private;
- Providing counseling and psychosocial support to individuals and families affected by HIV (MOH, 2000).

For tuberculosis, the overall objective laid out in the HSSP is the "control of TB through early diagnosis and treatment." The national targets (which are addressed by the results of this survey) to be achieved by the end of the plan period include the following:

- Achieving 100 percent national coverage with community DOTS (Directly Observed Treatment, Short-course) strategy; and
- Achieving an increase in TB treatment and cure rate (TB success rate) from 60 to 80 percent (MOH, 2000).

The HSSP provided the framework for the development of the survey instrument and for the reporting of the data in this report.

Chapter 2

Survey Objectives and Methods

2.1 Survey objectives

This nationally representative survey of government and non-governmental facilities serves to help the Ministry of Health (MoH) monitor and evaluate their HIV/AIDS care and support programs. The general objectives of the survey were as follows:

- Provide the MoH with current information on logistics system performance and stock status of key health commodities prior to the introduction of a new "pull" request and distribution system for health commodities;
- Provide the MoH with current information on the availability of HIV/AIDS prevention, care, and support services, including other STIs, TB and other opportunistic infections (OIs).
- Provide the MoH with information on the training of staff who manage and/or provide these services.
- Provide a baseline to measure the improvements in the logistics system for health commodities from USAID's support to the MoH through the DELIVER project and other USAID projects.
- Provide a baseline for measuring the improvements in HIV/AIDS support services from USAID and CDC support to the MoH through the AIM (AIDS/HIV Integrated Model Programme) Project.

The Commodity Management section of the survey was designed to assess the performance of the logistics systems that manage key health commodities and the availability and current stock of a selected list of health commodities. It involved the collection of quantitative and qualitative data about the performance of the logistics system, the quality and flow of information through the system, and commodity availability at all levels of the health care system. The quantitative data are used to calculate key logistics indicators that are described in Section 2.6. The survey also assessed certain activities (i.e., training, ordering, distribution, transportation, supervision, etc.) within the system so that recommendations could be generated to improve services and commodity availability at the district level and service delivery points (SDPs).

The Service Provision section of the survey was designed to assess availability and management of key HIV/AIDS services, infection control in health care facilities, and laboratory capacity. Data was collected on the types of services offered, staff training, and infrastructure (infection control, protocols, laboratory capacity) relevant to providing good quality services for HIV/AIDS.

2.2 Methodology

A literature review was carried out to evaluate the types of surveys that had recently been conducted in Uganda and to review the current status of HIV/AIDS activities in Uganda. This information informed the development of the survey objectives and instrument. A survey manual was also developed to accompany the instrument, both to assist with the training of data collectors and to serve as a resource document for

collectors while in the field. Data collectors were recruited in Uganda, and a total of 27 MoH staff and independent consultants were selected to carry out the survey at sampled sites throughout the country.

After the initial reviews and revisions of the instrument, a four-day training session was carried out for all data collectors to explain the objectives of the survey and to train collectors on how to use the instrument, including general information on logistics and HIV/AIDS support services. The group also made additional revisions and adaptations to the instrument and manual to meet local needs. The entire team then carried out a field test of the instrument at health facilities in Kamuli district, near Kampala. The experiences of the field test were discussed extensively and final revisions were made to the instrument and the accompanying manual for the actual data collection. The Director General of Health Services of the MoH sent a letter of introduction to each of the survey sites selected in the sample (see Appendix I) in advance of the teams' arrival. Each team presented themselves at the District Health Office to introduce the survey and to plan the logistics necessary to visit the selected facilities. Each District Health Office was asked to assign a district representative to accompany the data collection teams to facilitate the survey. Key informant interviews were also carried out with certain MoH staff at the central and peripheral levels to provide a more thorough understanding of the MoH's strategic plans in the areas of HIV/AIDS services, logistics management, and health commodity security.

Each questionnaire completed by the teams was carefully reviewed as they returned to Kampala prior to data entry. Data entry screens were developed using the CDC's Epi Info software. Each questionnaire was entered twice in order to clean the data and correct any data entry errors. Upon completion of the fieldwork and data entry and cleaning, the final sample of facilities was reviewed and weighted within each district. A final cleaning of the data was completed to support data analysis.

2.3 Sample design

The sample was designed to produce national estimates that describe the health care facilities in the country. The sampling frame was designed to include approximately 200 facilities, including 80 non-governmental facilities, in 12 districts. The 12 sampled districts included six AIM-designated districts and six non-AIM districts, in order to allow for comparisons to be drawn over time between those districts receiving technical assistance from AIM and those that do not. AIM districts were separated from the non-AIM districts and random samples of districts were selected within each group. AIM districts were over-sampled in such a way as to produce stable estimates for the strata.[1]

Within each of the selected districts, representative numbers of governmental and non-governmental facilities were selected to represent the services and health commodities available in each district. Also within each district, health facilities were stratified by type of facility (district hospitals and health center IVs, IIIs, and IIs), and proportional numbers of each type were selected to provide a complete picture of the facilities serving clients in each district. The district warehouse, where products and supplies are stored while in transit from the National Medical Stores in Entebbe to the health sub-districts, was also visited in each district. Only the commodity management section of the instrument was completed at the warehouses since no services are offered there.

2.3.1 Sample description

This section describes the sample design procedures implemented in the Uganda Health Facilities Survey 2002. The frame used in the selection for this sample includes health facilities (government and non-

[1] One objective of this survey was to provide baseline estimates for AIM (AIDS/HIV Integrated Model District Program), a USAID-funded project which focuses on HIV/AIDS interventions in certain districts in the country. Therefore, the sampling strategy included over-sampling of these districts. Analysis of the AIM districts is not provided in this report.

government) located in the 45 districts in Uganda listed in the 2000 Uganda MoH Inventory of Health Institutions. However, Uganda has undergone redistricting since 2000, and an updated Inventory of Health Institutions was not available at the time of the survey. For institutions selected into the sample that were in newly created districts, replacements were selected of the same ownership and level in the originally selected district. Each district was classified as an AIM or a non-AIM district: 10 districts were classified as AIM districts and the rest as non-AIM districts. Each facility was classified by type of facility (district hospital, HC IV, HC III, HC II, and district warehouse) and by ownership (government and non-government).

Six of the 10 AIM districts and six of the 35 non-AIM districts were selected for the sample of facilities. The selection of six districts, in each of these two groups, was done with probability proportional to size (size considered as the number of facilities in the district).

After facility stratification was implemented, a target of 20 selected facilities was obtained in each district. Actually, the number of facilities in two districts (Pader and Ntugamo) was almost or equal to this number of 20 facilities. The selection of the target of facilities in each district was done systematically. It should be pointed out that there is only one district warehouse in each district; therefore, it was decided that every district warehouse should be included in the facilities sample.

The final sample is described in Table 2.1. A total of 238 facilities were selected.

Table 2.1 Sample of facilities

Final facility sample size, by ownership, program area, and facility type, Uganda Health Facilities Survey 2002

Ownership/program area/facility type	Number of facilities	
Ownership		
Government	190	
Non-government	48	
Program area		
AIM	118	
Non-AIM	120	
	Government	Non-government
Facility type		
District warehouse	12	NA
District hospital	8	NA
HC IV	21	9
HC III	97	27
HC II	52	12

NA = Not applicable

It should be noted that Kampala district was not selected into the sample. This was by chance and the result of random sampling. It is known that many unique health care delivery facilities exist in Kampala district. The services of those facilities are not included in the estimates of this report. Nonetheless, the sample is considered unbiased and representative of the country. It is certain that some of the estimates would have been higher if Kampala had been included in the sample. These differences should be considered with the 95 percent confidence intervals that can be calculated based on the standard error presented in Appendix A.

2.3.2 Weights and minimum sample sizes for stable estimates

The design of the survey provides for over-sampling of some facilities, which allows for different weights to be attached to various facilities. All estimates in this report are accordingly weighted. Numbers of facilities are unweighted to allow the reader to appreciate the numbers of observations on which estimates are calculated.

While the results of the Uganda Health Facilities Survey 2002 have been judged to be robust, some caution in the use of the data is warranted rated to estimates based on a small number of facilities. This report provides estimates based on denominators of no less than ten facilities. An asterisk is used in cells of tables when the estimates are based on denominators less than ten. This rule is relaxed for hospital estimates. Because of the few numbers of hospitals in the country, estimates are provided with denominators as small as five facilities.

2.4 Data collection teams

Because of the sample size required to ensure a nationally representative number of health facilities, twelve teams of 2 to 3 data collectors were assembled to carry out the data collection during the two-week period of fieldwork. The teams consisted of a mix of senior and mid-level MoH staff, plus independent consultants hired specifically to carry out this survey. Upon reaching the District Health Office, each team was also assigned a MoH district representative for the duration of the data collection to facilitate the visits to facilities within each district and to serve as an additional team member for data collection.

At the start of the facility visit, the team met with the person in charge of the health facility or other knowledgeable person in order to understand the organization of the service delivery system for the HIV/AIDS, STI, opportunistic infections and tuberculosis services, as well as laboratory and pharmacy activities. This included designating whom to interview, where the services are being provided, where the laboratory is located, and where medications and supplies are stored and managed.

2.5 Survey instrument

The survey instrument is a structured questionnaire divided into two parts. Part I, Facility Infrastructure and Services Offered, collected data on HIV/AIDS and related services, sharps management and infection control, and laboratory capacity. Part II of the instrument, Commodity Management, collected data on health commodity logistics system performance and commodity availability at health facilities.

The instrument included sections on the following areas:

1. Availability of key HIV/AIDS prevention, care and support services, including voluntary counseling and testing (VCT), prevention of mother-to-child transmission (PMTCT), youth-friendly programs, programs targeted for orphans and vulnerable children, social support and post-test services for HIV-positive patients and their families, home-based care, management of opportunistic infections (OIs) in HIV/AIDS patients, STIs, and diagnosis and treatment of tuberculosis (TB);
2. Sharps management and infection control;
3. Laboratory diagnostics, including the capacity to conduct HIV, TB, and syphilis testing;
4. Pharmacy and health commodity management;
5. Availability of essential medicines and supplies.

Part II of the instrument on commodity management is derived from a standardized assessment tool developed by the DELIVER project called the Logistics Indicators Assessment Tool (LIAT). The LIAT is a primarily quantitative assessment tool that can be used to collect data to calculate key logistics indicators for program monitoring and for evaluating program impact. Part II included questions about key logistics operations such as managing and reporting logistics data, logistics management information systems, inventory control, ordering supplies, distribution, transportation, and training and supervision in logistics.

The list of health commodities studied for this survey includes several indicator commodities from seven categories of products: HIV test kits, contraceptives, drugs for treating opportunistic infections, malarial drugs, STI drugs, anti-retroviral drugs, TB medications, and several consumable supplies (see Appendix D). The list represents the range of commodities required to offer the HIV/AIDS services that were studied during this survey and are also representative of the wide range of health commodities managed through the MoH logistics systems.

An additional short interview questionnaire was added to solicit information from individual providers of HIV/AIDS support services about which services they personally offer and whether they had received any training or supervision in the HIV/AIDS service areas being studied.

2.6 Tabulation and key outcome indicators

The tabulation of this report focuses on two strata or categories of facilities: ownership and facility type. Ownership is either government or non-government, according to the definitions described in Section 2.3.1, in which the sampling frame is described. Facility type refers to the level of facility: district warehouse, district hospital, health center IV, health center III, and health center II.

The key outcome indicators for commodities management used for this survey are calculated using data from this section of the survey instrument. These indicators include:

- Stockout rates: The percentage of the facilities visited that experienced a stockout of one of the selected commodities during a six-month period between December 1, 2001 and May 31, 2002;
- Stock status: The average level of stock at facilities based on the physical count of stock and average monthly consumption at each facility. This indicator is reported as the average number of months of stock on hand;
- Expired products: The sum of expired commodities that were on the shelf or in the storeroom of each facility on the day of the visit;
- Data quality on stock cards: The percentage of facilities that use stock cards as well as the accuracy of the data kept on those stock cards compared to a physical inventory;
- Storage conditions: The percentage of the facilities that met a set of minimum acceptable storage conditions.

Unlike the commodity component of this survey, the service component did not have indicators developed specifically for the survey. The reports draw on a number of targets and objectives that the Ministry of Health has developed. Those objectives and targets serve as service indicators and are listed in Section 1.4.

Chapter 3

Health Commodity Management and Logistics System Performance

As decentralization unfolds in Uganda, policy-level changes are influencing how health commodities are managed and consequently the structure of the entire logistics system. There is recognition within the Ministry of Health (MoH) that priority must be given to addressing health commodity availability. In response, the MoH is increasing budgets for essential drugs and reproductive health products and reviewing the procurement of drugs and the role of the central medical warehouse. As a part of this shift, the logistics system for health commodities is moving from a "push" system to a "pull" system (see Section 3.6 for details). Overall commodity availability and logistics system performance are described below.

3.1 Commodity availability

The five-year Health Sector Strategic Plan (HSSP) designed by the MoH outlines the following goals for 2000/01–2004/05:

- Improve access of the population to the Uganda National Minimum Health Care Package (UNMHCP), paying special attention to increasing effective access for the poor, the difficult to reach and the otherwise disadvantaged;
- Improve the quality of delivery of the package; and
- Reduce inequalities between various segments of the population in accessing quality services (MoH, 2000).

Without the appropriate health commodities, health facilities and health care providers cannot offer the population a full range of comprehensive services and products to meet these goals. Ensuring health commodity availability to meet the needs of the clients that it serves is the ultimate goal of a logistics system—to make certain that clients receive the right goods, in the right quantities, in the right condition, delivered to the right place, at the right time, for the right cost.

For this survey, a list of 32 indicator health commodities were selected to represent the 67 commodities on the Uganda Essential Drugs and Health Supplies List (draft May 2002) that prioritizes the vital and essential health commodities required to fulfill the Uganda National Minimum Health Care Package. The MoH identified these specific categories and the commodities selected for this survey to represent the range of health commodities required for offering the HIV/AIDS support services described in Section 4.1 of this report. The list of commodities studied in this survey can be found in Appendix D; they are listed by brand name, generic name, and unit of count (e.g., cycle, tablets, vials). For consistency in data collection, substitutes of other units of count or brands of the same commodity were not considered. These indicator commodities were selected from among seven categories: HIV test kits, contraceptives, drugs to treat opportunistic infections (OI), malarial drugs, drugs to treat sexually transmitted infections (STI), anti-retroviral drugs (ARV), and tuberculosis (TB) drugs.

To establish the performance level of the logistics system in Uganda, the survey team interviewed the staff identified at each facility as the person responsible for commodity management and reviewed logistics reports and storage areas. To correspond with the survey of HIV/AIDS support services in Section 4.1, the health facility staff were asked if they are supposed to manage each of the commodities on the list, that is, whether a facility at their level is supposed to offer the services that require each commodity. According to the MoH's document on health services, all HC IIIs, HC IVs, and district hospitals

should have all of the contraceptives, malaria drugs, and STI drugs selected for this survey in stock and available to clients. The DOTS tuberculosis treatment program, which is currently operational in approximately 20 to 30 districts, requires the availability of TB blister packs. HC IIs will not necessarily maintain stock of the entire list of commodities studied. The survey results indicate that some HC IIIs, IVs, and hospitals reported that they do not manage each of the products that they are supposed to manage, often because of extended stockouts of certain commodities. For the analysis presented here, a stockout occurs when a facility has no supply of a particular brand even though there may be other supplies of other brands for the same method of treatment. The actual reported results for each commodity category are described in detail below. However, in order to calculate a few of the indicators presented later in this chapter, all facilities that are, in fact, supposed to manage each commodity according to the MoH were included in the denominator for calculations.

3.1.1 Commodity management

The essential drug list (EDL) has been revised, and drug price lists are now available from the National Drug Authority (NDA), National Medical Stores (NMS), and Joint Medical Stores (JMS). In October 2001, the MoH developed the National Drug Policy (NDP). The policy aims to "contribute to the attainment of a good standard of health by the population of Uganda through ensuring the availability, accessibility and affordability at all times of essential drugs of appropriate quality, safety, and efficacy, and by promoting their rational use" (MOH, 2000). With the new "pull" system, health facilities will be able to select the commodities they require and can afford from NMS after receiving approval from the health sub-district and district officials. The MoH has defined a minimum requirement for commodities that must be available at each level of the system based on the type of care different levels are expected to provide. The selection of commodities will be simplified with the introduction of a pre-printed order form.

In the area of financing for the health commodities, the Government of Uganda (GoU) remains very donor dependent. Even with large donor inputs, the MoH is still finding it difficult to secure the health commodities needed to fulfill the minimum health care package. The cost of the minimum health care package, as defined by the MoH, is US$2.40 per person. In 2002, the available funds (government and donor) came to US$1.10 per person. The extent of donor funding for each type of commodity is further discussed in this section.

3.1.1.1 HIV test kits

There is a major expansion plan in the area of HIV testing through the Global AIDS Fund, UNICEF, and the Model AIDS Program (MAP). Additionally, Uganda has recently received approval for US$51.6 million in the area of HIV/AIDS from the Global Fund for AIDS, TB, and Malaria (GFATM). Approximately 40 percent of this will be devoted to drug purchases. There are still policy questions to be decided regarding what HIV test kits to use, but plans are well under way in the areas of training and designing distribution systems. Official guidelines and protocols for HIV testing were not yet developed at the time of this survey. Section 4.1.2 on laboratory services presents more information on how the test kits studied are currently being used.

The targets set for 2004/05 in the HSSP include the following:

- Attaining a 25 percent reduction in HIV seroprevalence;
- Increasing and sustaining male condom use from 50 percent to 75 percent in rural areas, and sustaining the rate in urban areas at or above the current rate of 80 percent;
- Providing voluntary counseling and testing (VCT) services for HIV at all health units of HC III level and above;

- Reducing mother-to-child HIV transmission from 25–27 percent to 15 percent;
- Providing counseling and psychosocial support to individuals and families affected by HIV (MOH, 2000).

Table 3.1 shows the percentage of the government and non-government facilities visited that reported managing each of the HIV test kits studied.

Table 3.1 Management of HIV test kits

Percentage of facilities that reported managing various HIV test kits, by ownership, Uganda Health Facilities Survey 2002

Ownership	Capillus	Bionor	Determine	Serocard	Hema-strip	Multispot	Number of facilities
Government	4.0	3.7	2.9	3.8	0.1	1.1	183
Non-government	21.0	0.9	8.2	14.9	0.4	3.1	55

During this survey, Capillus and Serocard were found to be the most commonly managed HIV test kits in the non-government facilities, while Capillus, Bionor, Determine, and Serocard were the most commonly managed kits at the government facilities.

3.1.1.2 Contraceptives and condoms

The results of the 2000–2001 Uganda Demographic and Health Survey indicate an increase in the contraceptive prevalence rate from 15 percent in 1995 to 23 percent in 2000 (Uganda Bureau of Statistics and ORC Macro, 2001). During this period, there has been a corresponding increase in unmet need for family planning among married women from 29 percent to 35 percent. Donors (USAID, UNFPA and DFID) provided all the contraceptives distributed in Uganda until the late 1990s. In 2001, the MoH made its first purchase of contraceptives (400,000 units of Depo-Provera). Since 2000, some donors have withdrawn direct support of contraceptive products in favor of Sector-Wide Approach (SWAp) funding, which the MoH is expected to use for contraceptive supply purchases. MoH budgets have been submitted for the use of SWAp funds, but final levels are not yet certain. USAID and UNFPA continue to provide modest funding levels for contraceptives.

Social marketing organizations have also played a substantial role in distributing contraceptives. Both Commercial Marketing Strategies (CMS) (with funding from USAID) and Marie Stopes International (with funding from the German development bank Kreditanstalt für Wiederaufbau) have distributed contraceptives in Uganda. Commodities that are supplied directly to commercial marketing programs are included in the calculations for nationwide requirements. In theory, contraceptive needs should be in full supply (i.e., there should be sufficient quantities of contraceptives in country so that no client request will go unmet). However, contraceptive security is dependent not only on donor funding and commodities but also on an operational forecasting and procurement mechanism and effective commodity management.

The HIV/AIDS program of the MoH primarily manages condoms. Following a national stockout of condoms in 1999, there was a large purchase of condoms with World Bank funds in 2000. These condoms arrived in 2001 and distribution to the districts was completed in July 2002. Additional condoms have been ordered by the MoH and the MAP project, funded by the World Bank, and are due to arrive in early 2003. Additional purchases of 30 million condoms per year will be made by the social marketing programs run by the CMS project and by Marie Stopes International. Given the current condom projections, and delays in delivery of donated condoms, there is concern about condom availability after 2003.

In 2000–2001, there was a shortage of contraceptives, especially Depo-Provera. The Annual Health Sector Performance Report 2000–01 (AHSPR) states that management of logistics and supplies improved during the year but also identified a need to streamline logistics management for family planning and reproductive health (MoH, 2001). This program has been identified as a new priority area for year 2 of the HSSP.

Out of the 238 facilities visited during this survey (government and non-government), 66 percent of facilities reported that they manage Microgynon oral pills, 90 percent manage condoms, and 82 percent manage Depo-Provera. These three methods make up the majority of the method mix in Uganda.

While almost all government facilities reported managing these three contraceptive methods, the non-government facilities visited were managing them at much lower rates (Table 3.2). The low rates for Microgynon may be due to the fact that Lo-Femenal, a combined oral contraceptive pill identical to Microgynon, was also found in many facilities, and many service providers use the two brands interchangeably. In addition, some of the non-government facilities visited were faith-based and were therefore less likely to stock contraceptives.

Table 3.2 Management of contraceptives and condoms

Percentage of facilities that reported managing Microgynon oral pills, condoms, and Depo-Provera, by ownership, Uganda Health Facilities Survey 2002

Ownership	Microgynon	Condoms	Depo-Provera	Number of facilities
Government	72.7	98.0	87.9	183
Non-government	41.4	61.5	63.4	55

3.1.1.3 Drugs to treat opportunistic infections

Opportunistic infection (OI) drugs encompass a broad range of commodity types and many of the drugs are used to treat multiple types of infections. In practice, OI drugs are given both as treatment and as prophylaxis for people living with HIV/AIDS. There is a large overlap in use between STI and OI drugs. For this survey, fluconazole, co-trimoxazole and acyclovir were identified as indicators for OI drug management.

Of the 238 facilities visited during this survey (government and non-government), 9 percent reported that they manage fluconazole, 95 percent manage co-trimoxazole, and 6 percent manage acyclovir.

Table 3.3 shows the percentage of government and non-government facilities visited that manage each of these commodities. Co-trimoxazole is the most common drug, while fluconazole and acyclovir are managed by a much smaller proportion of the facilities visited.

Table 3.3 Management of drugs to treat opportunistic infections

Percentage of facilities that reported managing fluconazole, co-trimoxazole, and acyclovir, by ownership, Uganda Health Facilities Survey 2002

Ownership	Fluconazole	Co-trimoxazole	Acyclovir	Number of facilities
Government	6.9	94.2	1.7	183
Non-government	17.8	96.9	18.8	55

3.1.1.4 Malarial drugs

Malaria drug needs represent 50 percent of health center visits in Uganda (DISH Distribution of Stock and Drug Use Survey, May 2002). Resistance to present chloroquine treatments is increasing and the treatment protocol is changing in Uganda. These changes have made recent quantification exercises difficult. Chloroquine-based treatment drugs are included in the essential drug kits; however, sulfadoxine-pyrimethamine (SP)-based drugs, recommended internationally as the next line of treatment, are not. SP-based drugs will be distributed with the kits in July 2002.

According to the AHSPR, treatment failure was approximately 30 percent for chloroquine and 10 percent for SP. The National Anti-Malaria Drug Policy now suggests that the first line of treatment include a combination of chloroquine and SP. As this new policy is implemented, DFID and Ireland AID will pay for a one-year supply of chloroquine and SP. NMS currently offers SP drugs for sale, but these have not consistently been available in public sector health centers. USAID supports the private sector sale of anti-malaria drugs and is providing a malarial expert to work with the MoH. The GoU has requested US$45.1 million from the GFATM to support their work to fight malaria and TB.

The targets for 2004/05 set in the HSSP for malaria include the following:

- Increasing from 30 percent to 60 percent the proportion of the population that receive effective treatment for malaria within 24 hours of the onset of symptoms;
- Raising to 60 percent the proportion of pregnant women who receive protection against malaria through intermittent presumptive treatment with SP;
- Reducing malaria case fatality at the hospital level from 5 percent to 3 percent (MoH, 2000).

Of the 238 facilities visited during this survey (government and non-government), 98 percent reported that they manage chloroquine, and 94 percent reported that they manage sulfadoxine-pyrimethamine (Table 3.4).

At the time of the survey, almost all of the health facilities visited reported that they manage both of these drugs.

Table 3.4 Management of malarial drugs

Percentage of facilities that reported managing chloroquine and sulfadoxine-pyrimethamine, by ownership, Uganda Health Facilities Survey 2002

Ownership	Chloroquine	Sulfadoxine-pyrimethamine	Number of facilities
Government	98.3	94.9	183
Non-government	96.9	91.1	55

3.1.1.5 Drugs to treat sexually transmitted infections

Previously, sexually transmitted infection (STI) drugs were provided in STI kits using World Bank funding, but these funds were entirely spent by 2000. The last shipment of STI supplies funded through the World Bank STI project was received two years ago. STI drugs are available through the private sector pharmacies and retail outlets, and some health care providers choose to procure them independently in order to have them available to clients. Alternatively, providers send clients to the private sector to procure the drugs after diagnosis.

One of the HSSP's first-year targets was to procure and distribute STI drugs. At the time of the 2000/01 Performance Report, STI drugs had not been procured because the available funds had been reallocated to purchase essential drug kits. The HSSP set a goal for the "effective management of STIs and OIs provided in all health units" by 2004/05.

For this survey, ciprofloxacin, benzathine penicillin, doxycycline, and metronidazole were selected as indicators for STI management. Of the 238 facilities visited during this survey (government and non-

government), 63 percent reported that they manage ciprofloxacin, 86 percent manage benzathine penicillin, 67 percent manage doxycycline, and 95 percent manage metronidazole (see Table 3.5).

Table 3.5 Management of STI drugs

Percentage of facilities that reported managing ciprofloxacin, benzathine penicillin, doxycycline, and metronidazole, by ownership, Uganda Health Facilities Survey 2002

Ownership	Ciprofloxacin	Benzathine penicillin	Doxycycline	Metronidazole	Number of facilities
Government	61.2	84.1	64.5	96.1	183
Non-government	70.0	92.5	73.2	91.5	55

At the time of the survey, almost all facilities visited reported that they managed STI drugs. However, as noted in the Introduction and below in Section 3.1.2, stockouts and stock availability, even though STI drugs are supposed to be managed by the facility, they are not necessarily widely available at the health centers throughout Uganda.

3.1.1.6 Anti-retroviral drugs

The AHSPR indicates that HIV seroprevalence at sentinel sites and STI treatment clinics continue to decline. In addition, the report states that the GoU has negotiated a reduction in the prices for anti-retroviral drugs in order to increase access to these drugs. According to the AHSPR, the community is pressuring the government to ensure that anti-retroviral drugs (ARV) are both available and affordable. In response, the MoH has formed a committee to design a strategy to oversee the expansion of outlets for these drugs. In addition to being costly, launching a program for offering ARV treatment requires significant capacity in laboratory diagnosis of HIV and monitoring adverse reactions, plus counseling services. These issues will need to be addressed before an ARV treatment program can be widely implemented. At the time of the survey, only one of the non-government facilities visited had an ARV in stock (nevirapine). There are facilities in the country known to provide ARVs; by chance none were selected in the sample.

3.1.1.7 Tuberculosis drugs

Tuberculosis (TB) drugs are managed through the MoH TB Program. Drugs to treat TB are donated by the Stop TB Program and German Leprosy Relief. Currently, the TB program operates as a vertical system and delivers drugs directly to their regional coordinators. Regional coordinators distribute the TB drugs to local distributors. This vertical system is effective but inefficient in terms of leveraging MoH resources used for distributing other health commodities. The MoH is looking at ways to integrate deliveries with other medical supplies.

According to the AHSPR, TB case notification has been increasing at 8 percent per year since 1994. The AHSPR also states that the increase in TB could be primarily attributed to the effect of the HIV/AIDS epidemic and to an improvement in the capacity of the health services to detect cases of TB. Half of the new cases are said to be related to HIV infection. Given this linkage, management of these two diseases will need significant coordination.

For adequate control of TB, the treatment drugs should be maintained in full supply to meet all the needs of the population. Currently, TB drugs are packed in bulk bottles and blister packs. The blister packs are used by facilities that provide DOTS treatment for TB. DOTS is currently being implemented in about 20 to 30 districts, only a few of which were sampled for this survey. Management and availability of the blister packs is irregular because they have spread through the health care system, even to districts that have not yet officially launched the program. According to the HSSP, DOTS will be expanded to all

56 districts with a goal of 80 percent case identification by 2004/05. This will be done at a controlled pace given the time needed to train providers and "observers" (MoH, 2000).

Forecasting for TB drugs requirements is based on the number of reported cases. For each new reported case, a six-month supply of drugs is reserved and sent to the district that will manage the treatment. The quantities of needed blister packs will increase with the spread of the DOTS program and in light of the 8 percent annual increase in case notification mentioned above. The current supply is anticipated to last until early 2003. The next cycle of drugs will be paid for by the MAP project, and they are expected to continue to procure TB drugs for the next few years. As mentioned above, the GoU has requested US$45.1 million from the GFATM to support both TB and malaria programs.

Due to inconsistencies in the data collection for TB drugs, the availability of first treatment blister packs was taken as an indicator for TB drug availability and closely mirrors the percentages found of ethambutol, isoniazid and rifampin. Table 3.6 shows the percentage of facilities visited that reported managing the first treatment blister packs. Of the 238 facilities visited during this survey, only 35 percent reported that they manage TB blister packs.

As seen in Table 3.6, on the day of the visit, government facilities were managing first treatment blister packs at a slightly higher rate than non-government facilities.

Table 3.6 Management of TB drugs

Percentage of facilities that reported managing tuberculosis drugs, by ownership, Uganda Health Facilities Survey 2002

Ownership	TB blister pack	Number of facilities
Government	39.3	183
Non-government	21.4	55

3.1.1.8 Essential drug kits

Following Uganda's civil war, the Danish aid organization DANIDA began supplying essential drugs in pre-packaged, fixed-quantity kits in 1987. For the last 15 years, most essential drug supplies for lower level government clinics have been supplied through these kits. Originally, these were funded entirely by DANIDA, and are now funded 50 percent from DANIDA and 50 percent from MoH funds. The kits are currently "pushed" to the health centers by way of the district warehouses. The National Medical Stores (NMS), which charges ten percent of the commodity value to cover the handling and distribution costs, distributes the kits. The number of kits a facility receives is based on the population it serves. Each kit was designed to cover 800 cases/patients and each distribution was intended to meet a health facility's commodity needs for three months. In reality, facilities run out of many of the products before receiving resupply. The purchase of additional essential drugs from the NMS is possible. These supplemental orders depend heavily on available funds. Furthermore, because drugs are in short supply, it is suspected that many clients are referred to private pharmacies to purchase their commodities.

As stated above, the estimated cost for the basic health care package is US$2.40 per person. Current drug supplies from the MoH and donors are currently estimated at only US$1.10 per person. As a result, essential drugs are in short supply and will continue to be rationed in the future. The kits are being phased out as the public sector transitions to a pull ordering system for health commodities. The last shipments of essential drug kits were scheduled to go to the health facilities in September/October of 2002. As of January 2003, facilities will place orders with NMS based on funds allocated to each facility. Each facility will use a pre-printed order form and default orders will be available until training is completed at the local level. The GoU recently increased its current funding available for essential drugs at the HC II and HC III level by 34 percent. This is encouraging, but will not cover all the resources needed for commodity security at the facility level.

Availability of essential drug kits was assessed in a smaller sample of facilities (21). The contents of these kits are listed in Appendix D (Health Commodities Surveyed). Of this small sample, 75 percent

of the facilities visited had received essential drug kits in the last three months (HC IV, III and II). This is relevant to the results of this survey because the survey was carried out in the middle of a nationwide distribution of the kits. This fact may result in slightly inflated drug availability rates because of the number of the facilities visited that had just received a shipment of drugs in the month prior to the survey. This should be taken into consideration when readers review the drug availability and stock status results from this survey and when comparing these results to any future drug availability surveys.

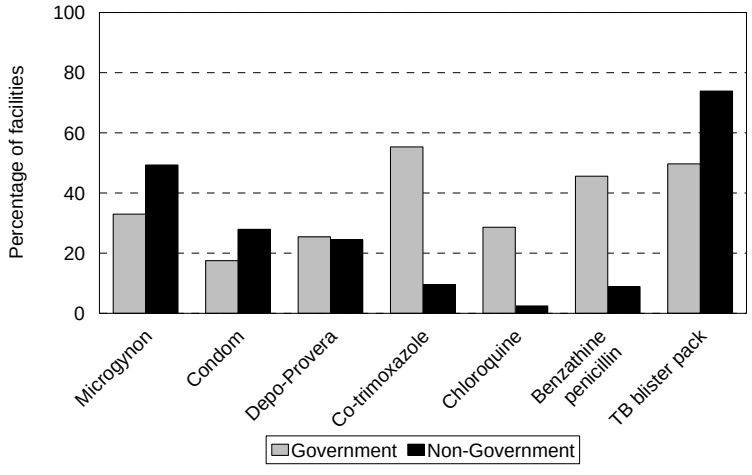
3.1.2 Stockouts and stock availability

Logistics managers strive to ensure a consistent and reliable supply of the products that they require to serve their clients. Health commodity security is achieved when every client is able to chose, obtain and use quality health products whenever she or he needs them. A key indicator to measure whether a logistics system has achieved this goal is stockout rates or, the opposite, stock availability rates. When facilities experience stockouts, they are unable to serve clients with a comprehensive range of health commodities or services. Because stock availability is the ultimate measure of logistics system performance, this indicator also gives an idea of the overall effectiveness and efficiency of the entire system, from forecasting and procurement to distribution, storage, and inventory management.

At each facility visited for this survey, facility staff were interviewed and stock records reviewed to collect information on stock availability on the day of the visit and for the six-month period prior to the survey from December 1, 2001 to May 31, 2002. A six-month period is reviewed in order to capture a more accurate picture of stock availability at each facility and to allow for seasonal trends in consumption (e.g., malarial drug use increases during the rainy season) and availability (e.g., periodic shipments of supplies).

Figure 3.1 shows the results of this review of stock records for a sample of the commodities studied. The graph shows the percentage of facilities that experienced at least one stockout of each commodity during this six-month period for all facilities combined (all levels, all districts), shown separately for government and non-government facilities.

Figure 3.1 Stockouts over the six-month period December 1, 2001–May 31, 2002



In the last six months, a larger percentage of facilities had a stockout of Microgynon than the other contraceptives studied. Only around 20 percent of all facilities experienced a stockout of condoms or Depo-Provera during this period. Over 50 percent of government facilities experienced a stockout of co-trimoxazole, 29 percent of chloroquine, 46 percent of benzathine penicillin, and 50 percent of the TB blister pack. For Microgynon, condoms, and TB blister packs, the non-government facilities had a higher frequency of stockouts than government facilities. For the essential drugs distributed through the kits (co-trimoxazole, chloroquine, and benzathine penicillin), government facilities were much more likely to experience a stockout than non-government facilities. In theory, both the contraceptives and TB drugs are kept in full supply to meet the needs of all clients; all hospitals, HC IVs, and HC IIIs should have co-trimoxazole, chloroquine and ben-

zathine penicillin in stock. As we can see from this graph, this is not happening in practice. Each stockout that takes place represents clients who will not receive the treatment that they were seeking at the health care facility.

In the HSSP, the MoH includes this same indicator—percentage of facilities without any stockouts for essential drugs (for the MoH, these drugs are chloroquine tablets, co-trimoxazole tablets, measles vaccines, and ORS sachets, with SP and Depo-Provera also monitored)—in a given time period. This should be collected through the health unit monthly report and will be monitored monthly and quarterly, with a goal of 90 percent of facilities without a stockout during a given time period by 2005. Figure 3.1 shows that there is much work to be done in reducing the occurrence of stockouts.

For a different look, stock availability on the day of the visit reflects whether the facility could offer a service and the related commodity to the next client (or clients) who visit a health facility. This indicator simply provides a snapshot in time and does not represent continuous availability over time. For example, the facility may have just used its last available injection, tablet, or test kit of a given commodity on the client who was seen before the data collection team arrived at the facility. Alternatively, the facility might ration commodities and offer them to only the most critical clients, in order to avoid a total stockout. Or the facility may have just received a shipment of commodities the week before the survey team's visit and therefore the facility appears to have an adequate supply of commodities. All of these scenarios are possible, and the data on stock availability at the time of the survey visit must be interpreted cautiously. In fact, as previously mentioned, the survey team discovered that a nationwide distribution of essential drug kits was underway at the time of the survey.

To assess this indicator, the survey teams looked at stock records and did a physical inventory to assess stock availability on the day of the visit at each facility. Table 3.7 shows the results of this review for a sample of the commodities studied, broken down by government and non-government.

Table 3.7 Stock availability on day of survey

Percentage of facilities in which each commodity was available on the day of the survey among those managing the commodities, by ownership and facility type, Uganda Health Facilities Survey 2002

Ownership/ facility type	Microgynon	Male condom	Co-trimoxazole	Chloro-quine	Sulfadoxine/ pyrimethamine	Cipro-floxacin	Benzathine penicillin	TB blister pack
Government								
District hospital	80.9	100.0	83.9	100.0	96.1	49.4	68.5	80.7
HC IV	91.1	100.0	72.5	94.1	76.4	24.9	58.0	92.3
HC III	76.4	87.1	70.2	87.7	72.4	41.6	56.2	89.6
HC II	17.1	31.1	54.7	66.0	30.8	5.9	16.5	*
Total	65.9	77.3	64.6	81.6	64.3	33.5	46.5	89.6
Non-government								
HC III	89.0	98.3	96.9	100.0	78.9	84.6	85.8	*
Total	84.6	91.5	90.5	93.3	69.2	77.2	79.4	91.2

Note: Facilities without stock records are excluded. An asterisk indicates that a figure is based on too few cases to present and has been suppressed.

The availability of Microgynon, co-trimoxazole, ciprofloxacin, and benzathine penicillin was substantially lower at the government facilities than at non-government facilities. Overall, commodity availability rates were found to be better at the non-government facilities on the day of the visit.

3.1.3 Stockout duration, December 1, 2001–May 31, 2002

As mentioned above, the survey looked at stockouts of the commodities studied both on the day of the survey team's visit and during the six-month period prior to the survey. However, this data does not yet give a measure of the severity of the stockout problem during this period or a means for differentiating between commodities stocked out for a short period of time versus those stocked out for long periods of time. An assessment of the average duration of those stockouts that occurred during that period provides us with a more in-depth look at how long the stockouts lasted and the probability that a client who sought health care during this time period would not have received the commodity or commodities needed.

Stockout duration data at non-government facilities was insufficient for reporting results. Facilities without stock records are excluded from the calculation since duration data was not available. Consequently, the results are limited and are not nationally representative, although the average duration of stockouts for all government facilities provides an interesting picture. Microgynon was out of stock for an average of 75 percent of this six-month period, while condoms and Depo-Provera were stocked out for an average of approximately 45 percent of this period. Chloroquine and SP fared much better at an average of 22 percent and 34 percent of the time, respectively, while ciprofloxacin and benzathine penicillin fared much worse at an average of 77 percent and 60 percent of this time period, respectively. Co-trimoxazole was out of stock for an average of 31 percent of this period. It is clear that the stockouts that were recorded in facilities with stock records available were significant in impact because they were stocked out for considerable lengths of time.

3.1.4 Record keeping in relation to stockouts

When assessing the number and duration of stockouts during the survey, the survey teams also recorded whether the stock managers were keeping stock cards for the commodities managed and whether those stock cards were up to date on the day of the visit. This provides an indicator of the quality of record keeping and how well stock managers are actively monitoring and managing their inventory to avoid stockouts and stock imbalances that may result in expirations. In the public sector, the majority of facilities experiencing a stockout of contraceptives between December 1, 2001 and May 31, 2002 did not have an updated stock card on the day of the survey. Although the rates for other products are lower, it is clear from the survey results that many facilities that experience stockouts are not keeping their stock cards up to date. Information management will be discussed further in Section 3.3, Health Management Information System.

3.1.5 Reasons for stockouts

As seen above, widespread stockouts pose a chronic threat to the availability of services and quality of care. In order to better understand the causes of stockouts within the Ugandan public health commodity logistics system, the survey also attempted to qualify the reasons why the stockouts discussed above occurred. The survey instrument offered a choice of seven options to the respondents for the reason why the stockout occurred:

1. Higher level facility did not send enough products
2. Higher level facility did not send products in time
3. Increase in consumption
4. Did not request the correct amount
5. Did not request products at the correct time
6. Insufficient resources (financial, human or transportation, specify)
7. Other reasons

For Bionor HIV test kits, all responding facilities reported that the higher level did not send products in time and that insufficient funds were the main reasons cited for stockouts during this time period. The most commonly cited reason for stockouts for Microgynon and condoms was that the higher level did not send the products in time. For Microgynon, condoms, and Depo-Provera some facilities reported that the reason for stockouts was insufficient resources (financial, human, or transportation). For co-trimoxazole, chloroquine and SP, ciprofloxicin, benzathine penicillin, metronidazole, and doxycycline, again, the main reason given was that the higher level did not send the products in time. Most of these drugs are included in the essential drug kits that are shipped from the higher levels at regular intervals. For TB blister packs, reasons included that the higher level did not send the products in time or did not send enough products. Overall, the most common reason cited was that the higher level facility did not send products in time, most likely because of stockouts or low stock availability at higher-level facilities, as seen in this chapter.

3.2 Inventory management

3.2.1 Stock status

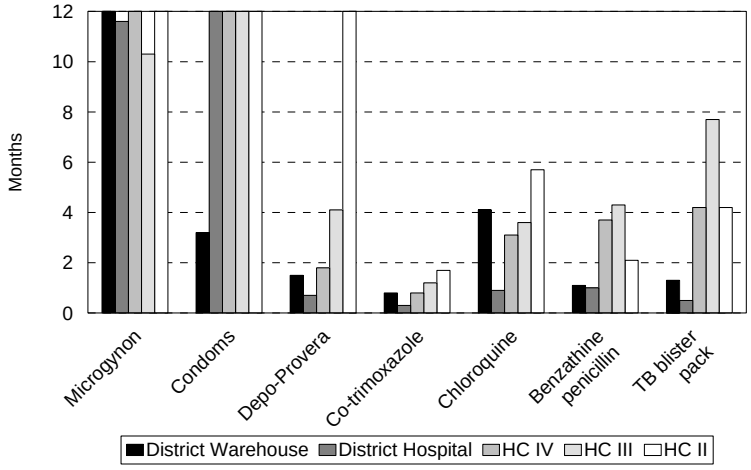
An assessment of the stock status of the commodities studied is an important complement to the stockout and stock availability rates presented above. Stock status offers an estimate of how long the commodities in stock will last to serve clients at the facility. Health facility staff can ration commodities in order to avoid a stockout; however, by rationing, or selectively offering commodities according to certain conditions, all client needs will not be met and the logistics system has not met its goal. Reviewing stock status provides a more profound picture of how commodities are being managed through the logistics system and also reflects upon the efficiency of the forecasting, procurement, distribution, storage, and inventory control processes. All of these components of the logistics system must be functioning effectively and efficiently in order to ensure that stock managers can maintain adequate stock levels. This indicator does not, however, highlight which component of the logistics system is not functioning properly, resulting in stock imbalances.

To ascertain whether stock levels of health commodities are adequate, an indicator on the average number of months of stock on hand is calculated. This indicator provides this data for a particular point in time (i.e., the day of the survey team's visit) and can identify situations where commodities are overstocked, which could lead to commodity expiration and wastage, and situations where commodities are stocked at low levels which could result in rationing of commodities or stockouts. To calculate this indicator, data collectors carried out a physical inventory of the commodities studied and reviewed the stock ledger or stock cards to gather historical data on the quantities consumed by clients or issued from one level of the system to another during the six-month period prior to the survey. The average monthly consumption or issues rates were calculated and then compared to the physical inventory to establish the number of months of stock available to be dispensed to clients or issued to other facilities on the day of the visit. Record keeping is obviously an important key to inventory management and this will be discussed in the next section.

The draft guidelines for drug management (draft May 2002) indicate that all health commodities will be managed according to the same inventory control procedures. The Health Management Information System (HMIS) has distributed written instructions regarding how to assess the adequacy of current stock levels. For all levels of the system, the minimum amount of stock that managers should keep in stock, and which indicates when to place an order, is two months' consumption. The maximum amount of stock, or the level that facilities' stock on hand should reach when an order is placed but should not exceed, is five months' consumption. These inventory control procedures have not yet been officially implemented.

Figure 3.2 shows the average number of months of stock on hand at each level for government facilities. It is clear that, on the day of the visit, two of the contraceptives studied, Microgynon and condoms, are significantly overstocked, with one year or more worth of stock at all of the service delivery points (SDPs). For condoms, these high stock levels are likely due to the fact that a one-year supply of condoms was distributed to facilities between March and July, so they were just arriving during this survey. For most of the remaining commodities, the stock levels are low at the higher levels of the system and higher at the lower levels of the system, which is where they need to be to serve clients. Most of these commodities are stocked according to the proposed inventory control levels, with the exception of co-trimoxazole, which is understocked at all levels, and TB blister packs, which are overstocked at the HC III level. It is important to reiterate that a wave of distribution of the essential drug kits began immediately prior to the survey and was ongoing during the survey. This distribution may affect the results in some of the districts visited that had already received their shipments and therefore had adequate stock of these commodities by the time of the survey. On the other hand, those districts that had not yet received their scheduled shipment of the kits were running very low on supplies in anticipation of their shipments.

Figure 3.2 Stock on hand (government facilities)



Note: Facilities without stock records are excluded. UHFS 2002

3.2.2 Expired products

Not only does effective inventory management reduce the chance of experiencing stockouts or stock imbalances, it also helps prevent losses through expiration. Using first-to-expire, first-out (FEFO) inventory management, where the stock that will expire first is placed in the front of the shelf to be used first, commodity managers can better monitor expiration dates to ensure that products are used before they expire. This can also help to ensure that expired products are not distributed to clients but rather are removed from inventory and disposed of properly. Managers may also transfer excess supplies that they recognize will not be used at their facility before expiring to other facilities who may be able to use them faster. Because expired products can no longer be offered to clients, they can contribute to the threat of stockouts or stock imbalances if they are not properly managed, separated from usable stock in a timely manner, and replaced with usable stock. Furthermore, most health care systems in developing countries operate with limited funding; health commodities are precious and rarely in full supply. Therefore, losses of otherwise usable commodities due to expiration should be avoided at all cost. As with other indicators noted above, reviewing the quantities of expired stock provides another measure of overall logistics system performance, though it will not highlight the causes or the components responsible for any deficiencies in performance. Some amount of commodity loss to expiration is expected in any logistics system, but large quantities should be investigated.

Because of a lack of available historical data on expired products, the survey teams counted the total amount of expired commodities that were either on the shelf with usable commodities or anywhere inside the storeroom on the day of the visit. No rates can be calculated from this data, but there were several cases of high amounts of expired commodities worth noting. In many cases, the expired products represented specific cases; for example, there was a total of 1,223,888 expired cycles of Microgynon. The

large majority (1,219,362 cycles) were found at a non-governmental HC IV in Luwero district and a smaller amount in a government HC III in Nebbi district. A total of 82,257 expired condoms were found in different districts, at different levels, mostly in the public sector (63,313). Further, 18,943 expired condoms were found at the HC III level at NGO facilities visited in Rukungiri district, and 805 expired Bionor HIV test kits were found. Government facilities in Lira district accounted for the majority of these expired drugs (663). For STI drugs, a total of 2,450 expired vials of benzathine penicillin were found at government and non-government facilities at various districts and levels of the system.

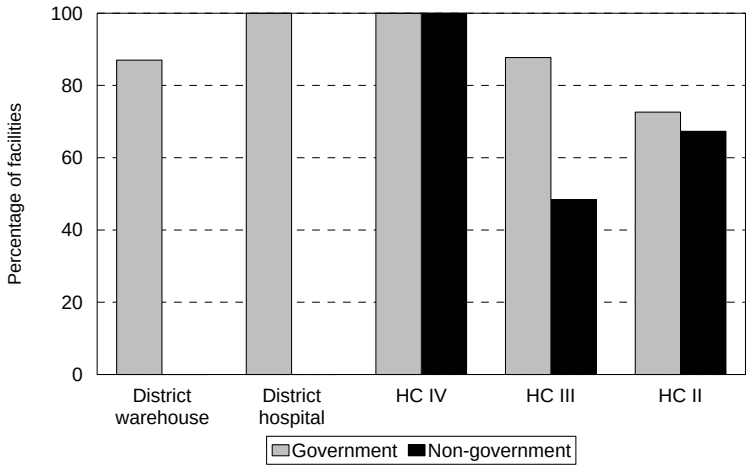
3.3 Health Management Information System

Valid and timely information can greatly improve stock managers' ability to identify, forecast, and procure sufficient quantities to meet the needs of the facilities in the supply chain and ultimately the needs of the clients at service delivery points. By making decisions based on the current stock status and projected needs based on past consumption trends, stock imbalances can be avoided. The essential data items needed for such decisions include stock on hand, the rate of consumption for each product, and losses and adjustments. This data can be routinely collected through a logistics management information system (LMIS) which is the engine of a logistics system.

In Uganda, this information is collected through the Health Management Information System (HMIS). The HMIS was recently redesigned by the MoH to include forms that will enable all levels of the system to track commodity availability. The new forms include stock cards, records of issuing, requisition and issue vouchers, and a form for revising the average monthly consumption. Information from individual facilities is entered and consolidated at the district level and sent to the MoH office in Kampala. The AHSPR reports an improvement in the timeliness and completeness of HMIS reporting in the last year. It is the intention of the MoH to use the HMIS system to track commodity availability at the health sub-district level and eventually at the facility level. However, the monthly report does not contain information regarding the stock status, only if the facility is stocked out. The system is automated at the central level with plans to automate at the district level.

The instructions for the HMIS forms require that any commodity which is kept for more than one week are to be tracked using a stock card. The stock card includes information on where the commodities were issued to or from, the quantity issued, and the balance on hand. Of the 238 warehouses and service delivery points visited during the survey, 79 percent reported that they have the stock cards and are using them. Figure 3.3 compares the difference in the reported use of stock cards for commodity management between government and non-government facilities.

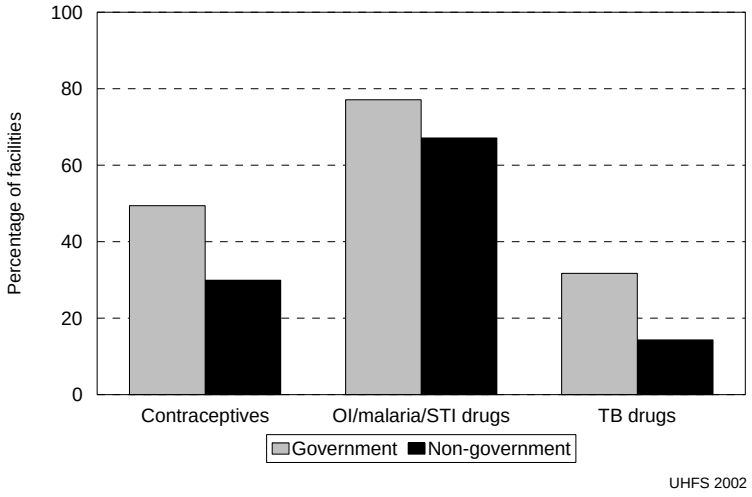
Figure 3.3 Reported use of stock cards for commodity management



At the district hospital and HC IV level, all of the facilities visited reported using stock cards to manage their inventory. However, at the HC III and HC II levels, fewer facilities reported using stock cards, and government facilities reported using stock cards more often than the non-government facilities visited.

In reality, among all facilities, 45 percent were found to be using stock cards for at least one of the contraceptives studied; 75 percent were found to be using stock cards for at least one of the essential drugs for treating OIs, malaria, and STIs; and 28 percent were using stock cards for at least one of the TB medications studied. Figure 3.4 shows the difference between government and non-government facilities by commodity category. Government facilities maintain stock cards at a higher rate than non-government facilities, and the results show that stock card use is more common at the higher levels of the system. Facilities are much more likely to maintain stock cards for one of the essential drugs than for contraceptives or TB medications.

Figure 3.4 Actual use of stock cards by commodity category



Accurate data on the current stock status is vital for effective decisionmaking at every level of the system. The survey collected information regarding the accuracy of logistics data at the facility level. For each commodity studied, the quantity of stock on hand was recorded by reviewing the stock cards and by taking a physical stock count. A comparison of the overall average percent discrepancy between the stock card and the physical count for all facilities surveyed revealed that there was a median discrepancy of 84 percent for contraceptives, a 40 percent median discrepancy for OI/malaria/STI drugs, and a 92 percent median discrepancy for TB drugs. There are no consistent patterns in the discrepancies found between the different levels of the system; however, it is clear from the summary data presented in Table 3.8 that the general quality of the data recorded on stock cards in the facilities surveyed is poor, particularly for TB drugs and contraceptives.

Table 3.8 Data quality: median percent discrepancy

Median percent discrepancy between the quantity of stock available for distribution as recorded on the stock records versus the count from a physical inventory of those facilities that manage contraceptives, essential drugs used to treat OIs, malaria, and STIs, and TB drugs studied and that have stock records available, by ownership, Uganda Health Facilities Survey 2002

Ownership	Contraceptives	Number of facilities stocking contraceptives	OI/malaria/STI drugs	Number of facilities stocking OI/malaria/STI drugs	TB drugs	Number of facilities stocking TB drugs
Government	84.0	81	40.8	129	91.3	35
Non-government	83.0	10	24.9	35	536.0	6

Note: Facilities without stock records are excluded.

3.4 Training in logistics and human resources

Health workers in Uganda begin their training for their assignments in pre-service nursing, pharmacy, medical, and other public health schools. This usually includes a module on management, including record keeping, financial management, facility management, and supplies management. Staff responsible for managing health commodities need to be trained in how to maintain stock cards, how to calculate order quantities and place orders, and how to fill out records and reports. These activities, when done accu-

rately, help to ensure proper stock management and to give an accurate picture of consumption rates and stock on hand at each facility. Without well-trained staff, facilities run the risk of poor record keeping and inaccurate ordering, which in turn can lead to stockouts, overstock, and expired products.

In-service training can be carried out periodically to update staff on new developments, revised procedures, or new technologies. In 1999–2000, the Ugandan MoH carried out a nationwide training on planning and management for 100 heads of health sub-districts. The MoH also trained health workers in 12 districts on the recently revised HMIS in early 2002. This training included how to fill out the HMIS reporting forms and procedures for reporting health information.

When conducting the commodity management portion of the survey, the survey team interviewed either the staff in charge of managing the commodities or, if not available, the person acting as the in-charge on the day of the visit. In order to gather information on whether the staff interviewed about commodity management on the day of the facility visit had received any training in logistics management, the instrument included questions on when and what specific training they received. Respondents were also asked how they learned to complete the logistics forms used at this facility, either during a logistics training, during on-the-job training, self-learned on the job, or other forms of training. However, these indicators do not provide insight into the quality of the training provided nor the trained staff's ability to apply the material taught nor whether performance has improved as a result of the training.

Overall, 32 percent of all facilities had at least one person available on the day of the visit that had received training in logistics management (e.g., ordering, receiving supplies, and inventory management) (see Table 3.9).

Table 3.9 Availability of staff trained in logistics

Percentage of facilities with at least one staff member trained in logistics available on the day of the survey, by facility type and ownership, Uganda Health Facilities Survey 2002

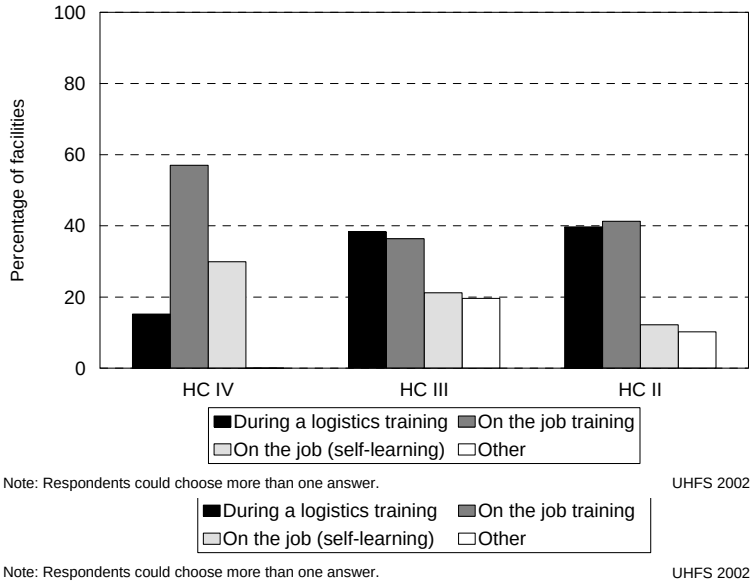
Facility type	Government	Number of government facilities	Non-government	Number of non-government facilities
District warehouse	79.6	12	NA	NA
District hospital	55.4	8	NA	NA
HC IV	23.5	16	22.2	9
HC III	30.8	86	20.1	31
HC II	26.5	61	50.0	15

NA = Not applicable

There was no clear distinction between the percentage of government versus non-government facilities that had at least one person available on the day of the visit who had received training in logistics for HC IVs. However, for HC IIs, twice as many of the non-government facilities had a trained staff person on the day of the visit. For all types of facilities except the district warehouses and half of the district hospitals, most facilities did not have trained staff in charge of commodity management.

Of all the stock managers interviewed, 37 percent reported that they learned how to complete the forms used at the facility during a logistics training, while 46 percent reported learning during on-the-job training, 33 percent reported self-learning on the job, and 12 percent reported that they learned elsewhere. Figures 3.5.1 and 3.5.2 show the differences between government and non-government facilities by facility type.

Figure 3.5.2 Training in completing logistics forms (non-government facilities)



Note: Respondents could choose more than one answer. UHFS 2002

During a logistics training
On the job training
On the job (self-learning)
Other
Note: Respondents could choose more than one answer. UHFS 2002

Of the government facilities, a greater proportion of district hospital and warehouse staff received formal training in logistics. However, HC IV and HC III staff were most likely to have learned through on-the-job training, and HC II staff were more likely to have learned how to complete the logistics forms through on-the-job training or self-learning.

A common concern expressed by some of the facility staff interviewed was that there were limited opportunities for in-service training for maintaining skill levels. Other respondents expressed that some skills were weak because frequent supply shortages meant that they were not often applying the skills learned.

3.5 Supervision in logistics

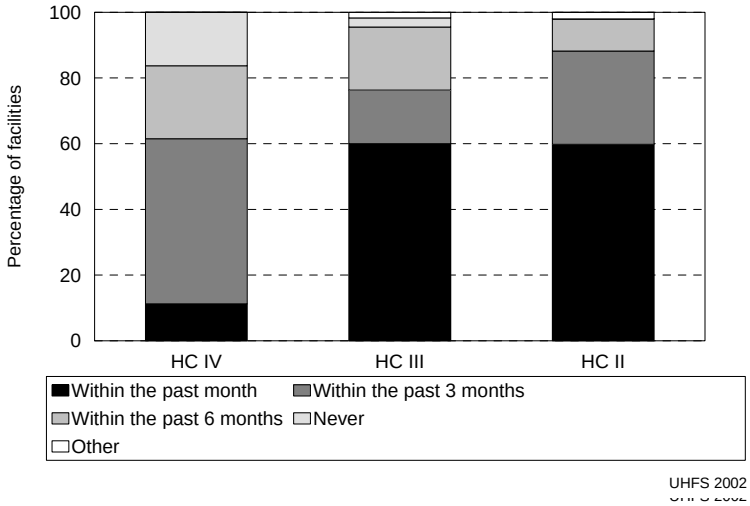
Supervision of the logistics system and the staff who manage it is necessary to ensure that the system is running properly, to anticipate the need for adjustments to the system, and to improve staff performance and quality of care. Effective supervision can help avoid problems or resolve them quickly. Supervision visits can also be an opportunity for monitoring and evaluating HMIS and on-the-job training of staff.

In Uganda, supervisory systems for the public sector health care system are in place and routine schedules exist. The MoH's "Indicators for Monitoring Health Indices" includes an indicator for the average number of supervision visits conducted during a quarter, which should be reported on the Health Unit Quarterly Report. According to the national guidelines, every health facility should receive a monthly supervisory visit from district and/or health sub-district staff.

The survey results give an estimated measure of the frequency of supervisory visits and the types of logistics issues addressed during supervision. Each respondent for the commodity management section of the survey was asked when he or she received their most recent supervisory visit. They were also asked what was done during the visit, including the following activities: supplies checked, stock cards checked, expired stock removed, HMIS reports checked, on-the-job training/coaching, or other activities.

Overall, 85 percent of the government facilities had had a supervisory visit in the past three months and 58 percent had received a supervisory visit within the past month. Figures 3.6.1 and 3.6.2 show the timing of the most recent supervisory visit for government and non-government facilities by level.

Figure 3.6.2 Most recent supervisory visit (non-government facilities)



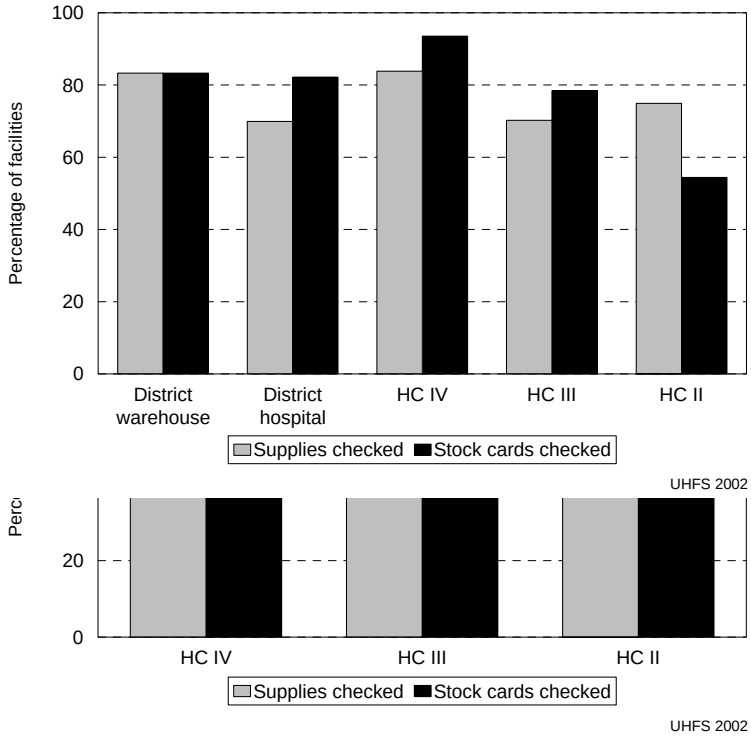
Although supervision is reportedly taking place at the majority of facilities, supervision is less frequent at the higher levels of the system, including the district warehouses, while the majority of HC IIs and HC IIIs in both the government and non-government sectors had received a supervisory visit in the month prior to the survey.

Of the logistics-related activities carried out during supervision, two are highlighted in Figures 3.7.1 and 3.7.2: whether supplies were checked and whether stock records were checked. For both government and non-government facilities, both supplies and stock cards were checked during the majority of recent supervisory visits at government facilities and at non-government HC IVs and HC IIs.

3.6 Forecasting, ordering, and procurement

Forecasting or quantification involves the estimation of the quantities of health commodities a program or a specific facility will dispense to other levels of the logistics system or to clients for a specific period of time in the future. In order to generate a well-informed and accurate forecast, commodity managers need good data on consumption trends by clients or on issues from one level to another. These data can be collected through the logistics or health management information system, but the data must be complete,

Figure 3.7.1 Supervision of logistics practices (government facilities)



timely and accurate, within an appropriate margin of error, to inform decisions on future use. This is critical to ensure that sufficient quantities will be procured and distributed to storage and service delivery points to meet clients needs. Because forecasting involves an estimation of need, some margin of error is to be expected, particularly when forecasting for long periods of time.

Once a solid forecast or projection of future needs is completed and budget levels established at the level where orders are made, the commodity manager can place an order for the forecasted amount of products and procure those commodities according to established procurement policies. Lower levels of the logistics system are not usually responsible for procuring commodities but rather usually place orders to the higher level. These functions—forecasting, ordering, and procurement—are necessary to determine the resupply quantities each facility will need and to ensure that those quantities arrive at the proper time and at the right cost to ensure continuous availability throughout the system. They are key components of the logistics cycle and critical for ensuring that the logistics system can meet its objective of making commodities available to the service providers who will dispense them to clients.

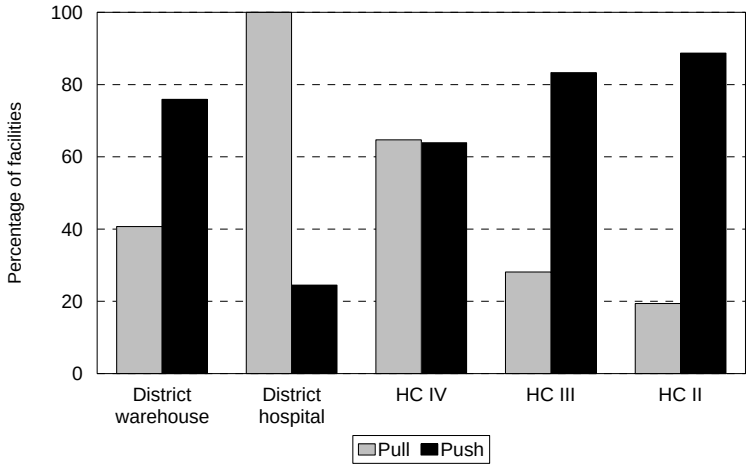
Under the new decentralized system in Uganda, health facilities will complete their orders every two months and send them to the health sub-district (HSD). The HSD will authorize orders from the facilities in their area. After receiving approval from the district, the HSD will order commodities from the National Medical Stores (NMS). NMS, an autonomous government corporation, was established in 1993 to procure, store, and distribute medicines and other health commodities to the public and private health sectors in Uganda. NMS is responsible for carrying out the international procurements of health commodities for the country and also receives and manages donated commodities (e.g., contraceptives, vaccines, TB medications) at the central level. If commodities are unavailable at NMS, the HSD will receive a letter indicating unavailability, and they are then authorized to purchase the commodities from another source. There is a parallel service offered by the Joint Medical Stores (JMS) that primarily serves NGOs and other private sector health facilities. The public sector does not routinely utilize the JMS as a supplier unless the NMS does not have commodities available. For public sector facilities, the up-front financial requirements and lack of delivery service at the JMS make purchases from JMS problematic. The NMS maintains a credit line or funds available for each facility in the country. This fund is drawn upon as facilities place orders throughout the fiscal year. The credit lines are tracked by the NMS and notification of the remaining balance is sent with each filled order.

The items ordered are packed by NMS according to the district requests and will be distributed to the district every two months. The transition to this new system is still underway, and the efficiency and effectiveness of the design will need to be assessed in the very near future. In the meantime, regional pharmacists will be tracking the flow of commodities monthly and will be conducting quarterly visits. Funding for essential drugs is now being provided directly from the MoH to districts and in some cases to health sub-districts for the purchase of drugs and other supplies, shifting logistics decision-making to this lower level. However, the absence of logistics training in how to make these decisions creates a real risk that commodities will not be properly planned for or purchased in the correct amounts.

In logistics systems, there are two types of ordering systems, “push” and “pull,” distinguished by whom and how order quantities are determined. Uganda has been operating as a push system in which the staff who issue the supplies determine the quantities to be issued to each facility, in Uganda’s case through a pre-packaged essential drug kit system with commodities in fixed quantities. However, the MoH is currently transitioning to a pull distribution system in which the staff at the district and health sub-district levels who receive the supplies determine the quantities to order. The fixed quantity drug kits will be gradually phased out, and staff will have to determine order quantities for individual commodities for their facilities based on consumption trends and the availability of funds. Beginning in late 2002, the NMS plans to begin delivering commodities to each district every two months, and orders should be placed every two months using the HMIS pre-printed order forms.

Overall, 41 percent of facilities reported that they determine their resupply quantities at least some of the time. In the current push system, 68 percent reported that the higher level facility determines their resupply quantities. Facilities could choose more than one answer for this question because there is not always a clear distinction of responsibility for calculating resupply quantities. For example, the essential drug kits are most often pushed in fixed quantities to each facility; however, each facility can also order supplemental commodities to complement the kits to fulfill their needs. Figure 3.8 shows that while all of the district hospitals determine their own needs and HC IVs are a mix of push and pull ordering, the lower levels and the district warehouses rely mostly on the higher level to determine their order quantities in the public sector.

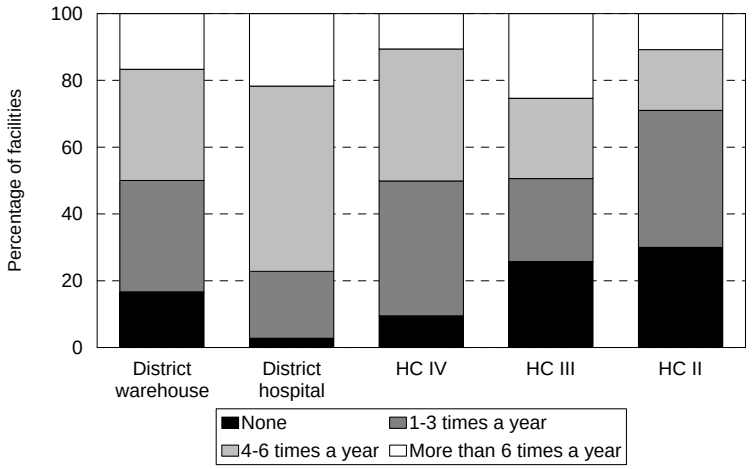
Figure 3.8 Push vs. pull ordering practices (government facilities)



UHFS 2002

The survey also looked at how often facilities placed orders in the last year. Twenty-five percent of the government facilities and 26 percent of the non-government facilities placed between 4 and 6 orders in the past year. In other words, a quarter of the facilities already place orders at intervals similar to what the new pull system will require. These facilities, in some capacity, are assessing their commodity needs to place orders. Of the government facilities, Figure 3.9 shows that the majority of district hospitals, warehouses, and HC IVs are placing orders between 1 and 6 times a year. As mentioned above, by the end of 2002, all facilities should begin placing commodity orders to the next highest level of the logistics system every two months. The MoH and NMS are committed to meeting this demand for government facilities.

Figure 3.9 Frequency of orders placed in past year (government facilities)



UHFS 2002

3.7 Distribution and transportation

Distribution and transportation are very important links in the supply chain for managing health commodities. Timely distribution of the correct quantities of health commodities is critical for ensuring a continuous supply. In resource-constrained environments, efficient use of transportation and/or transportation resources is key to minimizing wasted deliveries or trips to pick up or deliver commodities. Distribution of health commodities in Uganda is also being redesigned to reflect the decentralization of decisionmaking, ordering, and commodity delivery responsibilities.

Currently, the NMS receives orders from and delivers products to each of the 56 districts. The districts are then responsible for delivering the appropriate commodities to the health sub-districts. Each facility then collects their commodities from the health sub-district (HSD). The MoH and NMS are exploring options for distributing commodities directly to the HSD level. In November 2002, a distribution cost study will be carried out to explore the possibilities of having NMS deliver directly to the health sub-districts. This would involve NMS delivering to 214 HSD sites as opposed to the 56 districts to which they currently deliver commodities. From the HSDs (HC IV level), the majority of health centers are within a reasonable distance to pick up their commodities.

According to the survey results, 71 percent of facilities reported that they collect commodities from a higher level of the logistics system. The other 29 percent have the commodities delivered by other means: the district, health sub-district, supplier, or another mechanism. Table 3.10 presents these results by government and non-government facilities and by level of the system. Respondents could again choose more than one answer, since distribution often involves a mix of mechanisms in Uganda.

Table 3.10 Distribution

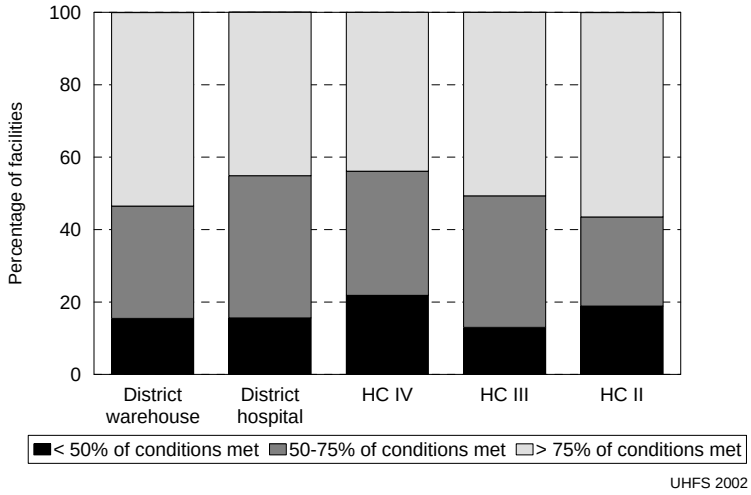
Percentage of facilities reporting various means by which they receive commodities, by facility type and ownership, Uganda Health Facilities Survey 2002

Facility type	Facility collects	District-level facility delivers	Sub-district-level facility delivers	Supplier delivers	Other
GOVERNMENT FACILITIES					
District hospital	80.9	17.8	0.0	59.4	20.0
HC IV	71.9	48.6	18.1	0.0	0.0
HC III	71.3	37.6	35.8	0.0	0.8
HC II	60.3	33.3	30.2	0.0	0.4
District warehouse	33.3	0.0	0.0	50.0	33.3
NON-GOVERNMENT FACILITIES					
HC IV	67.3	5.4	0.0	32.9	16.3
HC III	100.0	6.7	3.1	0.0	0.0
HC II	79.1	10.2	0.0	19.6	18.2

For all levels of the system, the majority of both government and non-government facilities reported that they collect their commodities themselves from the source of supply. Most warehouses, on the other hand, have their supplies delivered from the higher level or directly from the supplier.

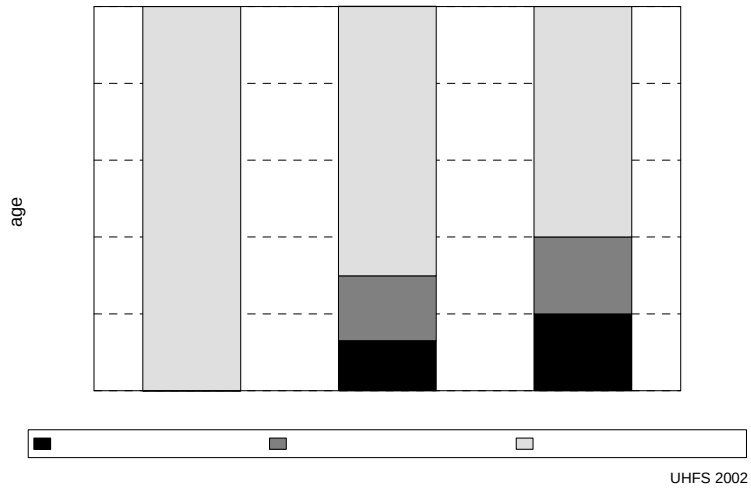
The survey further explored what modes of transportation are used to transport commodities to facilities. Poor infrastructure and road conditions and shortages in funding for fuel or other means of transportation often make distribution difficult. The modes of transportation most commonly used by government facilities are facility-managed vehicle (48%) or public transportation (48%) (Figure 3.10). The most common mode of transportation used in non-government facilities is public transport (70%), with a much smaller percentage using a facility-managed vehicle (27%). In the public sector, public transport is more frequently used at the lower levels, while a facility-managed vehicle is more commonly used at the higher levels.

Figure 3.11.1 Compliance to minimum storage criteria (government facilities)



3.8 Storage condi

Compliance to minimum storage criteria (non-government facilities)



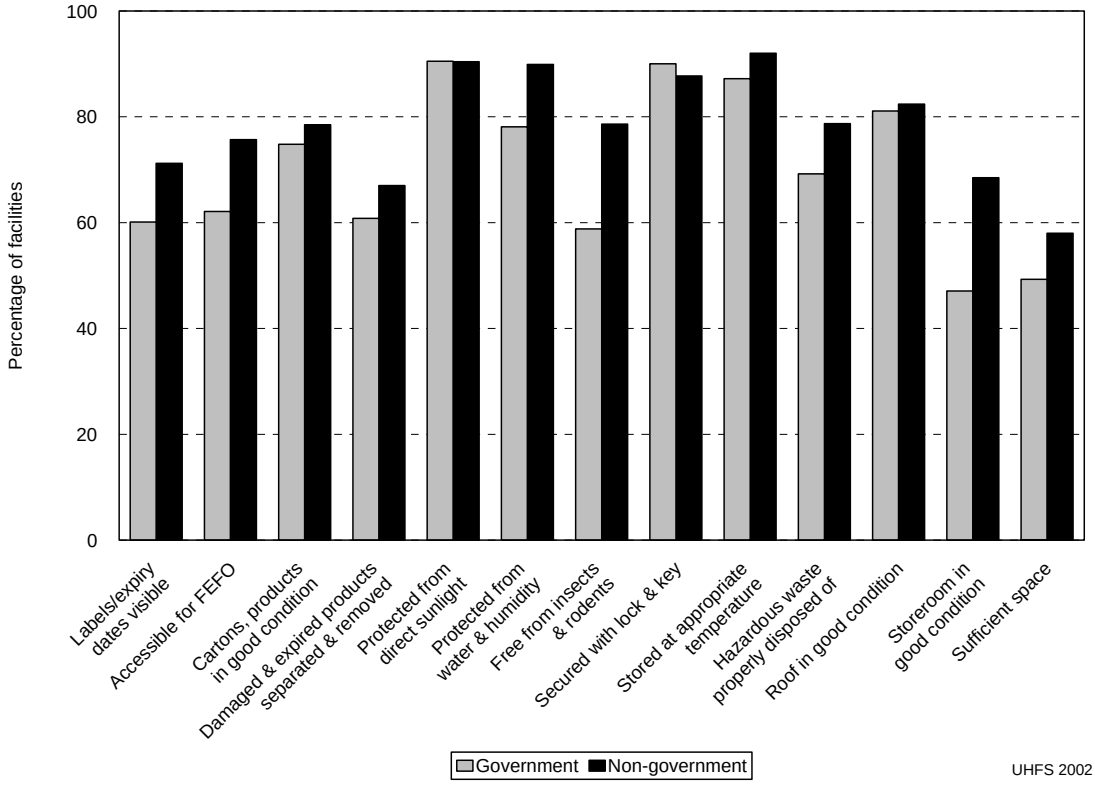
All health commodit ıt protect their integrity and effectivenes r distribution. When all levels of the syst hat they will receive a high-quality produ vel of the system to another, all levels o et of minimum standards to protect the c ery point.

At each facilit of the commodities studied. If commodi cklist was completed for each area. The su itions for all storage areas to ensure quali tions for larger storage areas that requir ey instrument in Appendix F). Some of vel of judgement on the part of the survey

Figures 3.11.1 and 3.11.2 present a summary of the level of compliance with the 13 minimum conditions for proper storage of health commodities in government and non-government facilities. It is clear that the non-government facilities comply with these conditions more often than the government facilities, although most of the government facilities also met the majority of the storage conditions studied. Overall, only about one-half of all government facilities met 75 percent or more of the conditions.

The individual storage conditions can also be analyzed to extract problem areas in need of improvement or reinforcement. Figure 3.12 shows the percentage of facilities that met each of the 13 minimum conditions for storage areas, broken down by government and non-government facilities.

Figure 3.12 Compliance with individual storage conditions



All of the minimum storage criteria were met by at least half of the facilities visited. However, in the survey team's judgement, about half of government facilities were not maintaining their storage space in good condition (Condition 12),[1] that is, clean, all trash removed, sturdy shelves in place, and boxes organized. Similarly, approximately half of the government facilities and close to half of the non-government facilities did not have sufficient space for the existing commodities (Condition 13)[1] or space for reasonable expansion (i.e., for receipt of expected commodity shipments in the near future). This is difficult to judge, however, because health commodities are not currently maintained in full supply and it is difficult to know whether storage space would be sufficient if commodities were in full supply.

[1] See storage conditions table, Question 429 (Part II Commodities Management), Survey Instrument (Appendix F).

Chapter 4

Service Provision

While it is feasible to offer outpatient health services under a variety of conditions, there are infrastructure, resource, and health system components that are important for enabling a facility to provide and maintain good quality health services, as well as to increase appropriate utilization by the population being served. The health services that are assessed by this survey include services for HIV/AIDS, opportunistic infections, sexually transmitted infections, and tuberculosis diagnosis and treatment.

The Uganda Health Facilities Survey 2002 (UHFS) assesses the following basic infrastructure and resources related to service availability:

1) Availability of a range of services, with a frequency that meets basic needs;
2) Availability of qualified staff;
3) Infrastructure that provides basic client amenities; and
4) Infrastructure to support 24-hour emergency services and higher technical diagnostic and treatment interventions.

Management and administrative systems are also important, to maintain and support quality health service delivery, to ensure that the health system is meeting the needs of the community, and to increase the probability that services will be appropriately utilized. The UHFS assesses the following basic systems and strategies related to maintaining and supporting quality health service delivery and appropriate utilization, including

1) Management, supervision, and staff development activities;
2) Systems and practices for infection control;
3) Logistics systems to ensure quality and quantity of medicines and diagnostic commodities;
4) Laboratory facilities; and
5) Availability of services, program components, and other aspects of services.

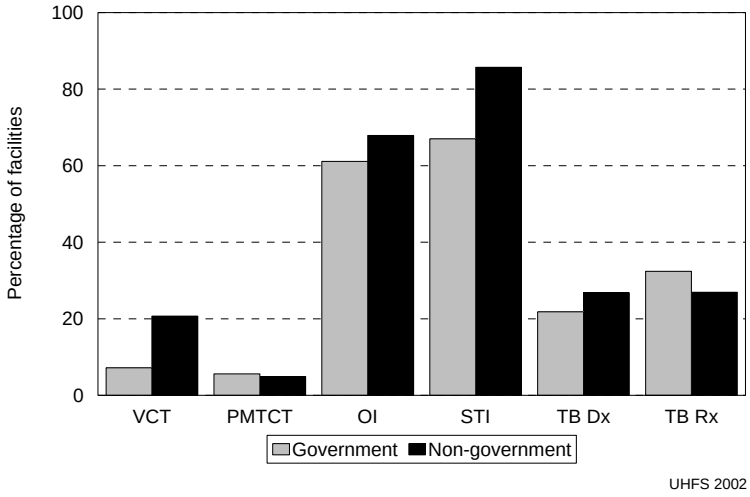
4.1 HIV/AIDS Support Services

The UHFS investigated programs related to HIV/AIDS services in areas including voluntary counseling and testing (VCT), prevention of mother-to-child transmission (PMTCT), "youth-friendly" programs, activities for orphans and vulnerable children (OVCs), home-based care, management of opportunistic infections (OIs) and sexually transmitted infections (STIs), and diagnosis and treatment of tuberculosis (TB). The survey asked if each of these services was offered in the facility. Definitions for these services were provided in the training manuals and were available to the interviewer as probes. For example, VCT service was defined as requiring all three of the following: 1) laboratory test for HIV on request; 2) staff responsible for counseling for all clients on prevention of HIV/AIDS; and 3) staff responsible for counseling positive clients. It is clear from the comparison of the responses to the question about availability of VCT service that the question may not have been well understood. Many of the facilities that reported having VCT services did not actually have laboratory testing for HIV on request. Because some of these definitions may have been a bit loose or may not have been completely understood, we present the availability of services in this section as the perception of the facility that such a service was offered. Details of

the instructions to the interviewers, definitions of services, and the probes used are available in the manual for the survey instrument (Appendix F). Comparisons of this perception of provision of service with the minimum criteria that is used to judge the services in Chapter 5 are useful to evaluate the meaning of these responses.

The survey investigated the components of each type of service, including outreach, partnerships, availability of guidelines, and existence of a register to record program information. Figure 4.1 shows the proportion of health care facilities in the country that reported providing certain HIV/AIDS services in government and non-government facilities. More detailed data can be found in Appendix G.

Figure 4.1 Facilities providing HIV/AIDS services, government and non-government



OI and STI services are much more readily available than the other services studied in all facilities visited. It is clear that a larger percentage of the non-government facilities visited offer VCT, OI, STI, and TB diagnostic services, while a larger percentage of the government facilities visited offer PMTCT and TB treatment.

4.1.1 Voluntary counseling and testing

HIV VCT services encourage safe sex practices to ensure prevention and positive living for those already infected. Since the implementation of the VCT strategy, considerable progress in the health care delivery system has been made, and over 400,000 individuals have been tested for HIV countrywide since large-scale counseling and testing were initiated.

Although HIV/AIDS counseling and testing facilities have been expanded considerably, there are still a number of constraints. These include: 1) inadequate HIV testing and counseling services, particularly in rural areas; 2) limited VCT counselors; and 3) low quality of testing facilities (e.g., staff, laboratories, and consumables) available at some sites.

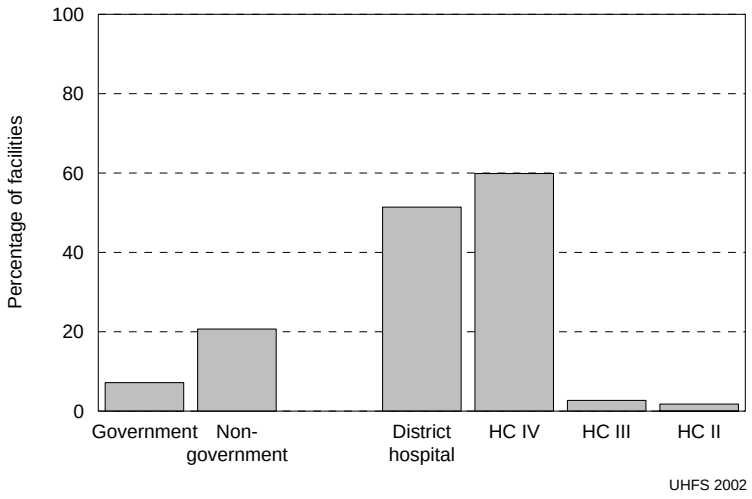
Based on this analysis, key recommendations have been identified in the Health Sector Strategic Plan (HSSP), including 1) expansion of HIV testing and counseling facilities to all districts; 2) development and provision of VCT guidelines to NGOs undertaking VCT and all districts; 3) training of VCT counselors and technical staff; 4) establishment of additional HIV VCT sites in other districts and sub-districts; and 5) carrying out VCT outreach activities (MoH, 2000).

The UHFS investigates many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. Highlights of the findings are presented in this section. More detailed data can be found in Appendix G.

Voluntary counseling and testing for HIV is reported available in 11 percent of the facilities in the country. VCT is more commonly offered in non-government compared to government facilities (21% and 7%, respectively). Differences among the various facility types and between government and non-government facilities are illustrated in Figure 4.2.

Of those facilities that reportedly offer VCT, the majority, 58 percent, are specialized services. All facilities provide counseling upon request and post-test counseling, and nearly all (99%) offer testing. Most (78%) report that guidelines are available in the clinic, and most (63%) have some type of visual aid to support services. The mean number of clients in these facilities is 39 per month.

Figure 4.2 Facilities providing VCT, by ownership and facility type



4.1.2 Prevention of mother-to-child transmission

Given the heavy disease burden due to HIV/AIDS associated with pregnancies and recognizing the benefits of averting vertical transmission of HIV/AIDS, prevention of mother-to-child transmission has been a focus area for intervention in Uganda. Since 1992, a number of achievements have been recorded in the prevention of HIV through PMTCT, including the launch of national policy guidelines for reduction of mother-to-child transmission.

The constraints that have been identified in PMTCT within the Uganda health care delivery system include: 1) inadequate supervision and adherence to medical precautions of mothers who give birth at home; and 2) limited capacity of the health care system to offer counseling, testing, and follow-up of clients, especially men, after delivery.

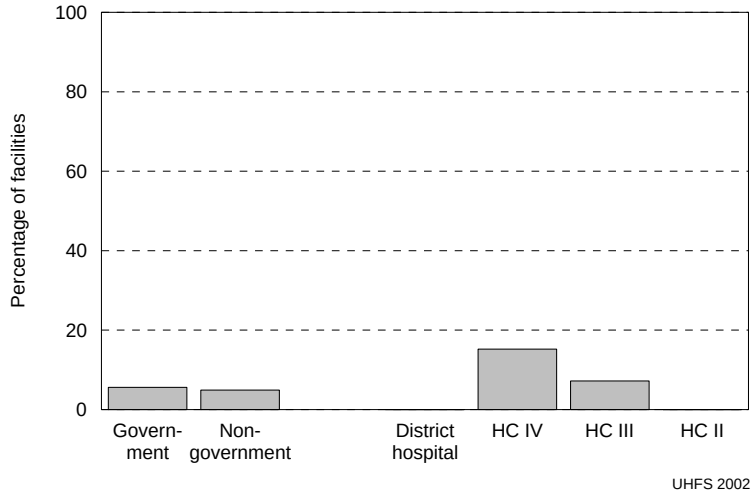
Based on this analysis, the HSSP has made the following recommendations for developing the health care delivery system: 1) initiate a phased implementation of PMTCT in selected health units; 2) strengthen awareness and sensitization on PMTCT in order to facilitate informed decisionmaking and reduce pregnancies among HIV-positive and discordant couples; and 3) promote utilization of disposable or sterile and other necessary maternal and child health, family planning, and safe motherhood equipment (MoH, 2000).

The UHFS looks at many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. Highlights of the findings are presented in this section. More detailed data can be found in Appendix G.

Less than 6 percent of all facilities surveyed reported providing PMTCT services; HC IVs were mostly likely to provide the service, with 15 percent of HC IVs offering PMTCT. Of all facilities surveyed, 20 percent reported offering anti-retroviral therapy (ART).

Figure 4.3 shows the proportion of facilities that offer PMTCT services by ownership and facility type. There are generally low levels of PMTCT services offered in the country.

Figure 4.3 Availability of PMTCT, by ownership and facility type



4.1.3 Services to improve the quality of life for the HIV-positive client

Provision of care for the HIV-positive client remains an important challenge for the health care delivery system of Uganda. Current estimates indicate that 1.9 million people may be infected with HIV, and 400,000–500,000 are living with full-blown AIDS. These people and their families need psychosocial support, health care, and sources of income.

Based on this analysis, key recommendations have been identified in the HSSP, including: 1) providing more support to local NGOs and community-based organizations (CBOs) providing AIDS care and treatment; 2) strengthening palliative care for people living with HIV/AIDS (PLHAs); 3) strengthening modern and herbal treatment for opportunistic infections; and 4) sensitization and education of community members on health care delivery, counseling, hygiene, nutrition and other relevant issues for PLHAs (MoH, 2000).

The UHFS studied many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. Highlights of the findings are presented in the next two sections on management and treatment of opportunistic infections and home-based care. More detailed data can be found in Appendix G.

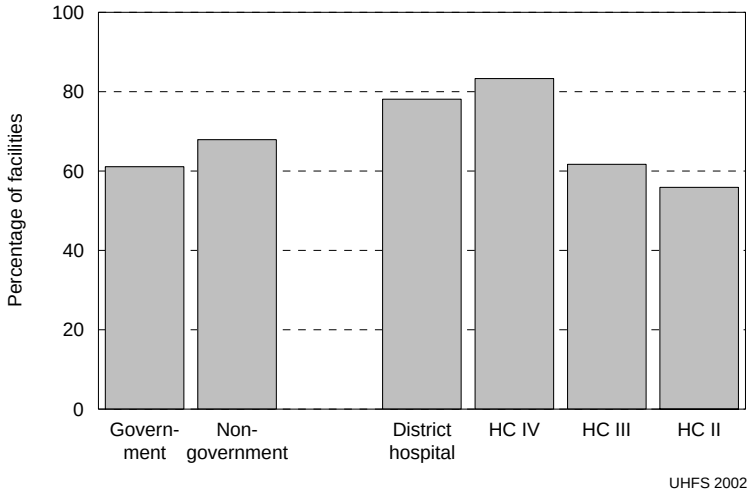
4.1.4 Management and treatment of opportunistic infections

HIV infection predisposes the infected person to a number of diseases, including pneumonia, cryptococcal meningitis, Kaposi's sarcoma, cryptosporidial diarrhea, candidiasis of the esophagus, and herpes infections. Tuberculosis is also considered an opportunistic infection (OI). Because of its importance in the Ugandan context, tuberculosis diagnosis and treatment is dealt with in a subsequent section.

Management (prevention, diagnosis, and treatment) of OIs in HIV/AIDS patients is reportedly offered in 63 percent of health care facilities in the country. The service is offered at different levels in different facility types and in government versus non-government facilities (Figure 4.4).

In facilities that offer management of OIs, most provide these services integrated with other services (97%). However, more than 25 percent of district hospitals offer specialized services for OI management. Most facilities that offer OI services provide counseling (88%) and prescribe drugs (99%). However, only one-third of these facilities provide laboratory diagnosis, and only 7 percent offer x-ray services. Guidelines are available in 60 percent of facilities that offer OI management. Most (over 90%) have a register to record program information.

Figure 4.4 Availability of OI management services, by ownership and facility type



4.1.5 Social, economic, and psychological support

It was recognized early in Uganda that the HIV/AIDS epidemic would result in serious social and economic consequences due to a changed pattern of public expenditures and private savings. The morbidity and mortality rates of the workforce would increase, leading to a serious loss of manpower. NGOs and CBOs have been the lead agencies in the provision of social support to PLHAs. Government ministries, through their AIDS control programs (ACPs), have also extended social support to the respective employees and their dependents.

Contributions of government, NGOs, and community in the following areas have helped mitigate some of the socio-economic impact of the epidemic: 1) development and support of income-generating projects (IGPs) as one way to minimize the adverse socio-economic effects on PLHAs; 2) provision of social support to PLHAs by NGOs/CBOs, religious groups and community; 3) training community-based counselors to enable community members to handle HIV/AIDS issues; and 4) setting up peer post-test clubs.

Based on this analysis, the HSSP has made the following recommendations for development of the health care delivery system: 1) provision of financial and material support (shelter, food, school fees) to AIDS orphans, child-headed households, and guardians/foster families; 2) promotion of economic and material assistance to PLHA families; and 3) promotion of protection of legal, ethical and social rights of PLHAs (MoH, 2000).

The UHFS addresses many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. Highlights of the findings are presented in the next three sections on targeted activities for orphans and vulnerable children, youth-friendly programs, and social support/post test services targeted to HIV-positive clients and their families. More detailed data can be found in Appendix G.

4.1.5.1 Targeted activities for orphans and vulnerable children

Targeted activities for orphans and vulnerable children (OVCs) can include programs and outreach services funded by the facility that address social issues, economic support, or psychosocial counseling for

OVCs and/or their caretakers. These services were reported to be available in 5 percent of facilities in Uganda. One-fourth of HC IVs had OVC services.

Among those facilities that reported having OVC services, most offer these services integrated with general services (62%). More than 95 percent of these facilities offer counseling, 49 percent offer support, and 53 percent organize groups. Guidelines for OVC services were available in 13 percent of the facilities.

4.1.5.2 Youth-friendly programs

"Youth-friendly" programs address adolescent audiences, focusing on youth participation, utilization of services, or outreach services funded by the facility. These services may relate to preventative education for HIV, VCT, diagnosis and treatment of STIs, family planning and safe motherhood services. Youth-friendly services were reported available in 12 percent of facilities in the country. One-fourth of HC IVs and 39 percent of hospitals have youth-friendly programs.

Among those facilities that reported having youth-friendly programs, most offer them integrated with general services (89%), and 85 percent have outreach programs. Ninety-five percent of these facilities offer STI diagnosis and treatment, and VCT is offered in 36 percent of those programs. Table 4.1 describes the level of the various program components in youth-friendly services by ownership and facility type. Guidelines for youth-friendly services were available in 34 percent of the facilities.

Table 4.1 Youth-friendly services

Among facilities with youth-friendly services, percentage of facilities offering various specific services, by ownership and facility type, Uganda Health Facilities Survey 2002

Ownership/ facility type	Group meetings	Information campaigns	VCT	STI Dx and Tx	Family planning	Safe motherhood
Ownership						
Government	63.1	86.2	35.0	93.4	93.6	85.9
Non-government	52.9	44.8	37.8	100.0	91.8	91.8
Facility type						
District hospital	100.0	100.0	100.0	100.0	100.0	100.0
HC IV	52.4	77.5	30.8	93.9	85.4	85.4
HC III	62.6	66.8	32.4	96.3	96.3	96.3
HC II	46.7	77.2	15.6	91.9	92.5	69.5
Total	60.6	75.9	35.7	95.0	93.1	87.4

4.1.5.3 Home-based care

The demand for palliative care services by patients with HIV/AIDS is expected to increase further as more people are infected. The annual population per hospital bed has risen to 800. Likewise, health personnel are now attending to many more patients as a result of the HIV/AIDS epidemic. As of 1997, patients with HIV/AIDS-related illness occupied more than 55 percent of hospital beds. Furthermore, health workers also experience psychosocial stress due to fear of being infected, while some may exhibit stigma. This implies that a proportion of PLHAs are turned away.

Home-based care is reportedly offered by 12 percent of the facilities in the country. Of those facilities that offer home-based care, 69 percent offer services that are integrated into general services, and 31 percent have specialized services. Over 87 percent of the facilities offer outreach services. Over 90 percent of the facilities that offer home-based care offer services in home, train caretakers, and do commu-

nity education and advocacy, while only 14 percent offer material support. Guidelines for providing home-based care are available in less than 30 percent of facilities.

4.1.5.4 Social support/post-test services targeted to HIV-positive clients and family

The AIDS epidemic has also adversely affected the economic sector. Unlike other illnesses, it selectively affects adults in their prime productive years. Sickness and death due to HIV/AIDS affects places of work through absenteeism and loss of skilled or trained employees. At the household level, treatment cost of AIDS financed from household savings reduces the capital available for investment in agriculture, education, and other areas. Furthermore, the time spent by relatives on care for AIDS patients is deducted from the time spent on production and income-generating activities. This tends to worsen poverty and increases inequality.

Social support/post-test services targeted to HIV-positive people and their families were reportedly available in 8 percent of facilities in the country. Half of hospitals and one-quarter of HC IVs had social support and post-test services. Services were available at approximately equal levels in government and non-government facilities (7%).

Among those facilities that have social support and post-test services, 48 percent offered them as integrated with general services, and 89 percent have outreach programs. All of the facilities offering social support and post-test services provided counseling, 21 percent provided support, and 66 percent had social programs. Guidelines for social support and post-test services were available in 44 percent of the facilities.

4.1.6 Sexually transmitted infections

The close association between the presence of an STI and HIV infection has made STI prevention and treatment an important component of HIV/AIDS prevention. Progress in the area of STI care includes 1) development and distribution of guidelines on syndromic management of STIs; 2) training service providers in diagnosis and syndromic management of STIs; and 3) integrating STI services with primary health care, maternal and child health, and family planning services.

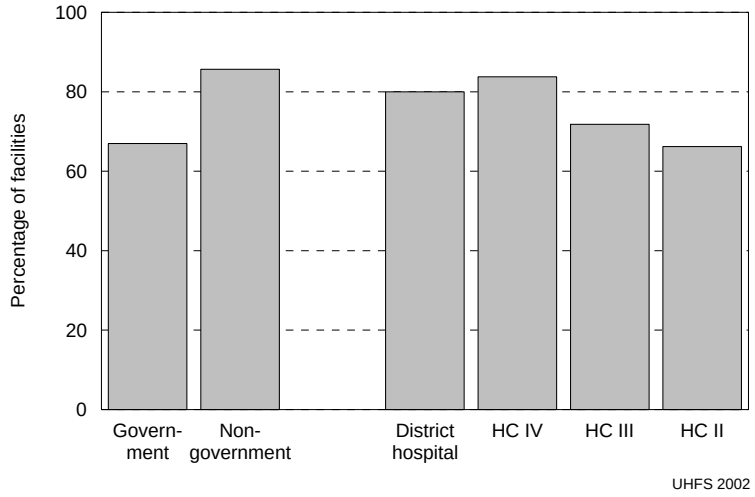
In spite of the progress realized, there are still a number of constraints in implementing the strategy of preventing HIV transmission through the prevention and treatment of STIs. These include 1) limited number of trained personnel in STI syndromic management; 2) low partner notification of STI infection (about 5–15 percent of STI patients ever notify their partners about their STI status [MoH, 1999]); and 3) inadequate treatment of STIs resulting in resistance to drugs.

Based on the assessment of the HSSP, recommendations include: 1) strengthen syndromic management of STIs through comprehensive screening and treatment and special studies to keep track of STI transmission and prevalence in core groups; and 2) integrate STI prevention and treatment into other health services (MoH, 2000).

The UHFS looks at many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. Highlights of the findings are presented in this section. More detailed data can be found in Appendix G.

STI services are reportedly provided by 72 percent of facilities in the country. Figure 4.5 shows the level of STI services by facility type and ownership. STI services are available in 67 percent of government facilities and 86 percent of non-government facilities. Most STI services are integrated into general services (98 percent).

Figure 4.5 Availability of STI services, by ownership and facility type



4.1.7 Diagnosis and treatment of tuberculosis

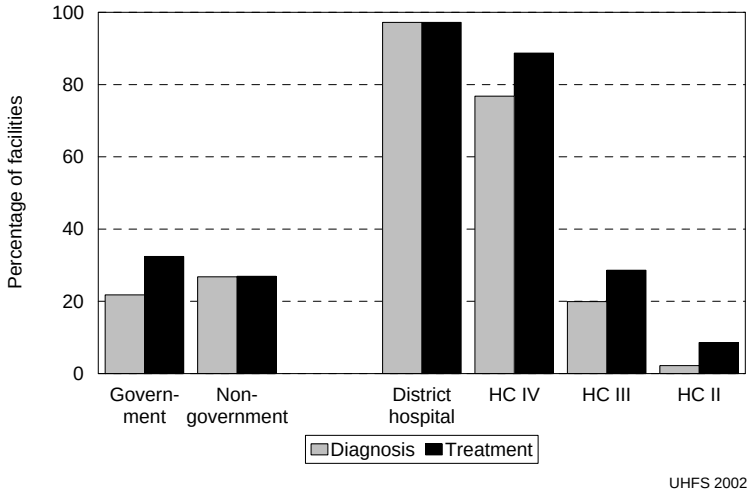
Tuberculosis (TB) has been identified as one of the common HIV-associated infections. A study conducted among a pediatric cohort revealed that 18 percent of HIV-infected infants developed TB compared with 1.4 percent of those not infected with HIV, and the successful response to treatment was 31 percent and 83 percent respectively.

Because the cost of TB treatment spreads over a long period of time, the capacity of hospitals and dispensaries is often over-stretched. The management of other infections commonly associated with HIV/AIDS also generally involves long periods of stay in hospitals and is expensive. Consequently, there is a general shift of emphasis from hospital-based care to home-based care as a means of reducing the pressure on hospitals and health units and providing similar services to PLHAs and community members wherever they may be. It is also recognized that integrating primary health care, AIDS care, and counseling into home-based care would enhance the quality of care for PLHAs while reducing the cost of care. The expansion of the DOTS tuberculosis treatment system to all health facilities is a goal of the current HSSP.

The UHFS addresses many of these issues by asking questions about program components, outreach, partnerships, availability of guidelines, and existence of a register to record program information. More detailed data can be found in Appendix G.

Figure 4.6 presents the proportions of all facilities in the country that reported providing tuberculosis diagnosis and treatment by ownership and facility type. Tuberculosis diagnosis and treatment are available in 23 percent and 31 percent, respectively, of health care facilities in the country.

Figure 4.6 Availability of tuberculosis diagnosis and treatment, by ownership and facility type



Hospitals are most likely to offer these services.

Over 90 percent of tuberculosis diagnosis services are integrated into general services across ownership and facility type. Tuberculosis treatment services are also highly integrated (over 85% of all facilities offering treatment).

4.2 Facility infrastructure and resources

4.2.1 Provider training and supervision

The UHFS interviewed providers of HIV/AIDS-related services in each facility regarding their basic training and experience, as well as recent (in the past three years) in-service training and experience with being personally supervised. Data collectors were instructed to interview all staff who were providing the services being assessed on the day of the survey. Anticipating that time might not be sufficient for this in large facilities, a minimum of 4 different staff interviews was required, with the selection ensuring that providers for all four of the following service areas would be interviewed:

1) HIV/AIDS counseling and testing services, including VCT and PMTCT;
2) Management of OIs;
3) Management of STIs; and
4) Tuberculosis diagnosis and treatment.

Where staff members provided more than one service, an attempt was made to identify other providers to ensure that interviewed providers covered as many of the specific services assessed in this survey as possible. It can be assumed that in most cases these criteria result in a sample where findings are positively biased, as staff whose attendance is irregular, or who are less active in providing services, are less likely to have been present.

The next three sections draw on the "Provider Interview" component of the instrument.

4.2.1.1 Training and experience

A total of 366 providers of HIV/AIDS-related services were interviewed. Of those interviewed, the majority were women (women 62%, men 38%). Professional midwife was the most common level of education among providers (23%), followed by medical assistants (22%), and professional nurse (20%). Only 2 percent of the interviewed providers were doctors.

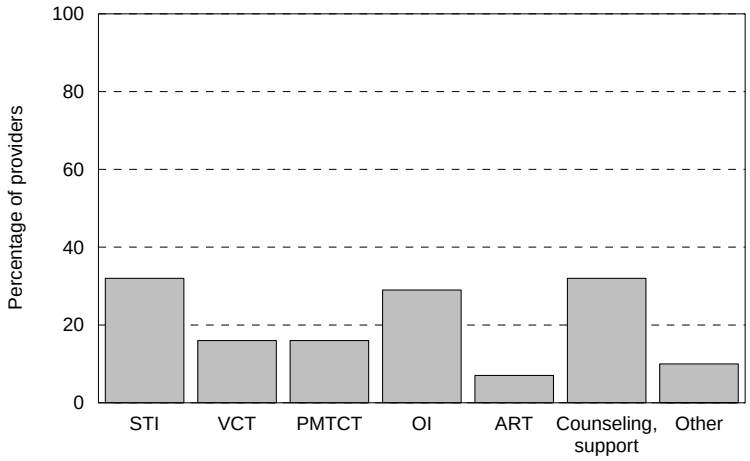
4.2.1.2 In-service training

In order to maintain levels of knowledge and technical competence achieved during basic training, it is essential that health workers be provided continuous exposure to current and new information, both to refresh knowledge and to update practices as new policies and protocols are introduced. This is most often achieved through in-service education. In addition, supportive supervision is important to ensure that standards and protocols are followed at the facility level and to promote an "organizational culture" where it is expected that these standards and protocols will be implemented.

Figure 4.7 shows the proportion of all interviewed health care providers who reported receiving in-service training in the preceding three years for any HIV/AIDS-related topics. Prevention and support counseling were the most frequently reported in-service training received by providers (32% each). In-service training for DOTS was reported by 11 percent of providers (data not shown), although, as noted in Chapter 3, DOTS had not yet been implemented in all districts at the time of the survey.

Table 4.2 shows the proportion of health care providers interviewed who reported receiving any in-service training in the past three years by ownership and facility type. Providers working in hospitals are most likely to have received any in-service training in the past three years, with over 80 percent of hospital providers receiving training.

Figure 4.7 In-service training in HIV/AIDS-related topics in the past three years



UHFS 2002

Table 4.2 In-service training of staff

Percentage of interviewed providers who reported having received any in-service training in the 3 years preceding the survey, by ownership and facility type, Uganda Health Facilities Survey 2002

Facility type	Government	Non-government
District hospital	84.0	NA
HC IV	62.5	66.2
HC III	43.9	44.3
HC II	41.8	43.8

NA = Not applicable

4.2.1.3 Supervision

Supervision of individual staff members helps to promote adherence to standards and to identify problems that contribute to poor quality services. The UHFS documents whether staff members report they have been personally supervised by someone from outside the facility during the past six months and, if so, how many times during the past six months they were supervised.

Table 4.3 shows the proportion of interviewed providers who reported being personally supervised by someone external to the facility within the past six months and the average number of times they were supervised, by ownership and facility type. Health care providers in Uganda reported being supervised an average of 3.4 times during the prior six months by external supervisors, with 86 percent of those inter-

Table 4.3 Outside supervision of providers

Percentage of interviewed providers who reported having received any outside supervision in the past 6 months, and average number of times providers were supervised, by ownership and facility type, Uganda Health Facilities Survey 2002

	Percentage receiving outside supervision		Average number of times supervised	
Facility type	Government	Non-government	Government	Non-government
District hospital	58.6	NA	3.1	NA
HC IV	88.1	64.9	4.0	2.1
HC III	89.2	82.4	3.7	2.5
HC II	96.6	79.5	3.6	2.6

NA = Not applicable

viewed providers having been supervised at least once.

Staff at government facilities were much more likely to receive supervision and at a higher frequency than non-government facilities. Among government facilities, an increasingly greater percentage of facilities at the lower levels received outside supervision.

4.2.2 Laboratory capacity and facilities

As stated in the MoH Annual Health Sector Performance Report (AHSPR), TB rates have steadily increased 8 percent each year since 1994. This is mainly due to the increasing number of people living with HIV/AIDS. The reported HIV prevalence rate in Uganda as of 2002 is 6 percent. People with STIs are at greater risk of contracting HIV.

Comprehensive and well-functioning laboratory services are imperative for the prevention, diagnosis and control of HIV/AIDS, and related communicable diseases such as TB and STIs. Laboratory tests are essential for early diagnosis of TB and for implementing and monitoring the effectiveness of treatment programs (such as DOTS). They are also essential for diagnosing HIV/AIDS (for VCT and PMTCT), and for monitoring effectiveness of treatments, including anti-retroviral therapy. In addition, laboratory diagnostic testing provides accurate diagnoses of STIs and OIs so appropriate treatment can be provided.

4.2.2.1 Indicators for laboratory diagnostics

In order to assess laboratory capacity for diagnosis of HIV, TB, and STIs, the survey identified basic criteria that must be available at each laboratory on the day of the visit. To conduct an HIV, TB, or syphilis test, laboratories require: a) trained laboratory personnel; b) laboratory equipment to conduct each of these tests, including availability of at least one test kit and reagents, a functioning microscope, glass slides, and a functioning refrigerator; c) sufficient power source for the refrigerator; and d) infection control commodities, such as sharps containers, disposable syringes, a waste receptacle with lid and liner, and soap and water for handwashing. A maximum of two laboratory staff persons were interviewed at each facility to gather information on in-service training on conducting one of these tests.

According to the 2000 MoH Inventory of Health Institutions in Uganda, all HC IIIs, HC IVs, and hospitals should be able to provide laboratory services. Although laboratory capacity was reviewed in the HC IIs visited, a very small number from the analysis presented in this report were found to offer laboratory services for these three diseases; therefore, HC IIs were excluded from the analysis presented in this report.

Among the surveyed facilities, only 27 percent of government facilities had the laboratory capacity to conduct any tests related to HIV/AIDS, TB, or STIs. Laboratory capacity in government facilities was most frequently found at district hospitals (97%), followed by HC IVs (88%), and least frequently in HC IIIs (26%). At non-government facilities, 100 percent of HC IVs and 31 percent of HC IIIs reported they had the capacity to test for at least one of these illnesses. Overall, 46 percent of all non-government facilities had the capacity to test for at least one of these conditions.

Qualified laboratory technicians are vital to providing proper testing and diagnosis. According to the MoH standards for staff at health center levels, facilities at the HC III level should employ at least one trained laboratory assistant, and at the HC IV and hospital levels, there should be at least one trained laboratory technician and one trained laboratory assistant. Table 4.4 shows the qualifications of the laboratory staff interviewed on the day of the visit at government and non-government facilities and what levels of training they received. Of the laboratory staff interviewed on the day of the visit, laboratory assistant is the most common qualification, while laboratory technologist or higher is the least common qualification.

Table 4.4 Qualifications of la

Percentage of laboratory sta
Uganda Health Facilities Surv

Ownership	Laborat assista
Government	63.8
Non-government	45.6

Availability of laboratory staff trained in testing for HIV, by ownership and facility type

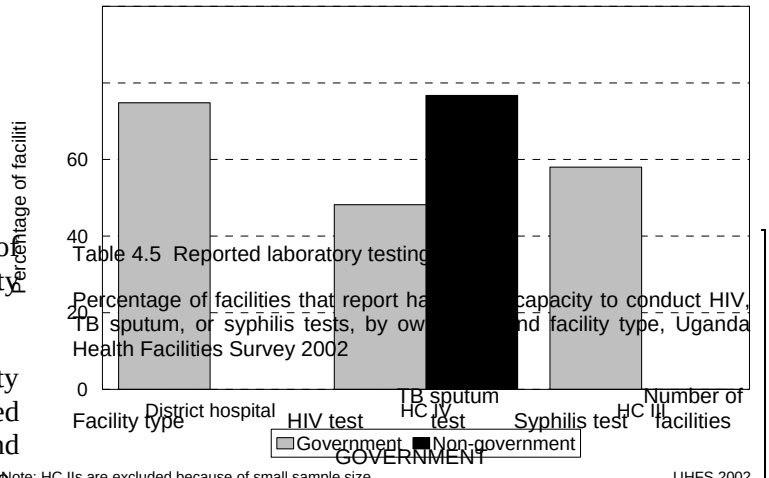


Table 4.5 Reported laboratory testing

Percentage of facilities that report ha capacity to conduct HIV, TB sputum, or syphilis tests, by ow nd facility type, Uganda Health Facilities Survey 2002

Note: HC IIs are excluded because of small sample size.				UHFS 2002
District hospital	79.4	97.2	97.2	8
HC IV	55.5	87.6	54.8	16
HC III	0.6	22.4	11.2	86
NON-GOVERNMENT				
HC IV	94.6	100.0	100.0	9
HC III	0.7	26.2	22.0	31

Table 4.5 shows the percentage of facilities that reported having the capacity to run HIV, TB, and syphilis tests.

The table illustrates that the majority of district hospitals and HC IVs reported the capacity to conduct HIV, TB, and syphilis tests. However, less than one-fourth of HC IIIs could conduct any of these tests.

4.2.2.2 HIV diagnosis

In order to diagnose HIV, laboratories must have at least two HIV test kits on hand and a functioning refrigerator with a sufficient power source to store HIV test kits that require a cold chain. Of the HIV test kits surveyed, Capillus, Bionor, Serocard, and Multispot require refrigeration. Of the 226 facilities surveyed, 12 percent reported the capacity to conduct an HIV test. Of the 16 government facilities that reported the capacity to conduct an HIV test, 99 percent reported having a functioning refrigerator, and 100 percent of the 10 non-government facilities reported a functioning refrigerator. At the government facilities, 100 percent of district hospitals and 98 percent of HC IVs reported having a functioning refrigerator. Not only do facilities need a functioning refrigerator to store HIV test kits requiring refrigeration, but they must also have a sufficient power source for the refrigerator to function properly to ensure that the cold chain and the efficiency of the test are preserved. Of the facilities that reported the capacity to conduct an HIV test and have a functioning refrigerator, 99 percent of government and 100 percent of non-government facilities reported having a sufficient power source.

As stated in the HSSP and according to the Uganda HIV/AIDS Control Project (UACP), district-level initiatives for HIV services include mobilization for and provision of VCT and PMTCT services. In order to offer these services at all HC IIIs, HC IVs, and district hospitals, all of these facilities must ensure that HIV test kits, functioning refrigerators, and sufficient power source are available. The facility must also have trained staff who can administer the range of HIV tests that are used in Uganda. Of the 26 facilities that reported the capacity to conduct an HIV test, Figure 4.8 shows the percentage of government and non-government facilities that had at least one staff person who had received in-service training within the past three years on administering HIV tests. The figure shows that the majority of government hospitals and HC IIIs had staff who had received in-service training in conducting an HIV test in the past three years, although none of the non-government HC III facilities did. However, at the HC IV level, a greater percentage of non-government facilities had at least one staff member who had received training in HIV testing in the past three years.

Among laboratories that reported the capacity to conduct an HIV test, Table 4.6 shows the percentage of staff who reported being trained within the past three years to conduct and read results for laboratory diagnosis using each HIV test studied. More than half of the government staff interviewed had received training on using Capillus, Bionor, Serocard, and Multispot. Among non-government staff, the majority were trained to use Capillus and Serocard.

Table 4.6 Staff trained in HIV laboratory diagnosis

Percentage of interviewed staff who reported having received in-service training in conducting or reading results for various kinds of HIV tests in the past 3 years, by ownership, Uganda Health Facilities Survey 2002

Ownership	Capillus	Bionor	Determine	Serocard	Hema-strip	Multispot	Unigold	Other	Number of providers
Government	63.6	56.4	29.2	65.4	4.0	61.7	23.9	35.6	15
Non-government	88.8	11.1	43.7	80.9	11.2	35.2	21.3	16.6	13

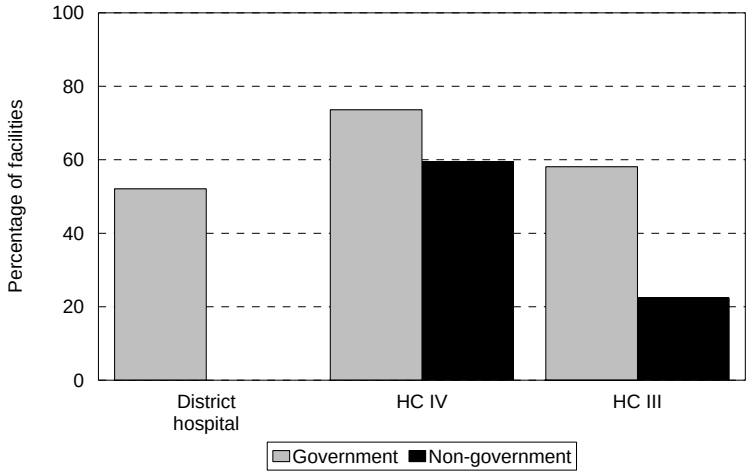
In order to provide VCT and PMTCT services, the laboratory staff must conduct a primary screening test and a secondary confirmatory test for HIV. If the results of the first and second test are discordant, then a third "tiebreaker" test must be used to give a final diagnosis. To ensure that the right test kits are available at the right laboratories, it is necessary to assess what tests facilities are using. The survey teams asked about which tests were used and the principal usage for each test. At both government and non-government facilities, Capillus was found to be the most commonly used primary test and Bionor the second most commonly used primary test. Serocard and Determine are the most commonly used secondary tests. Serocard and Multispot are most frequently used as a confirmatory or tie-breaking test.

4.2.2.3 TB diagnosis

Many different reagents are used in Uganda for conducting a sputum test for TB diagnosis, making it difficult to pick one or two reagents as indicators for testing. Consequently, the availability of the minimum requirement of equipment was used as an indicator of the laboratory's ability to carry out a TB test on the day of the visit. This equipment includes a functioning microscope and glass slides. Of the 65 laboratories that reported they had the capacity to conduct a TB test on the day of the visit, 43 are government facilities and 22 are non-government facilities. A functioning microscope was found in 92 percent of the government facilities, and 94 percent had glass slides. Of the non-government facilities, 98 percent had a functioning microscope, and 98 percent had glass slides.

Laboratory staff must be trained how to diagnose TB using a sputum test. Of the laboratory staff that were interviewed on the day of the visit, 64 percent of the government facility laboratory staff had received in-service training in how to conduct a sputum test, and 47 percent of the non-government facilities reported they had received training. Figure 4.9 shows the percentage of facilities that had at least one staff member who received in-service training for TB sputum testing in the past three years, among the 65 facilities that had the capacity to conduct a TB sputum test.

Figure 4.9 Availability of laboratory staff trained in testing for tuberculosis, by ownership and facility type



Note: HC IIs are excluded because of small sample size.

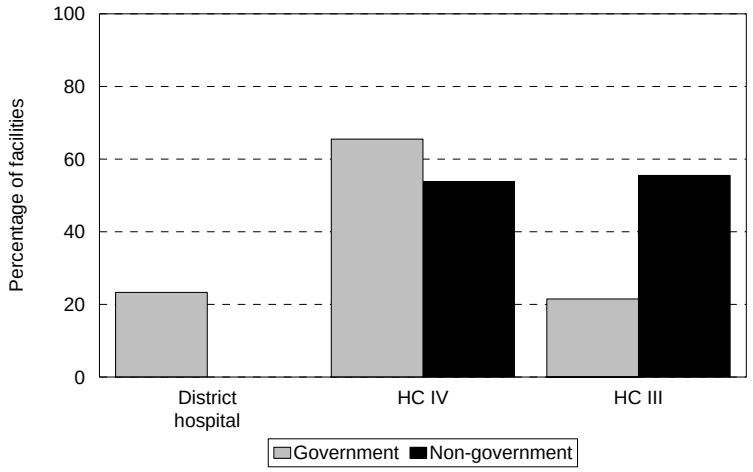
UHFS 2002

The figure shows that a greater percentage of government facilities have a staff member trained in conducting a TB sputum test, and that the highest percentage of both government and non-government facilities with trained staff are at the HC IV level.

4.2.2.4 Syphilis laboratory diagnosis

Of the 226 facilities surveyed, 21 percent reported the capacity to conduct a syphilis test on the day of the visit. The equipment and test kits required to conduct a syphilis test include a functioning microscope, glass slides, and a VDRL test kit, RPR test kit, or TPHA test kit. Of the 46 facilities that reported having the capacity to run a syphilis test on the day of the visit, 26 are government facilities and 20 are non-government facilities. Seventy-four percent of the government facilities reported that they had a functioning microscope, and 58 percent reported having at least one of the three syphilis test kits. Eighty-three percent of the non-government facilities had a functioning microscope, and 75 percent had at least one of the syphilis test kits. Laboratory staff must be trained on how to test for syphilis. Of the laboratory staff interviewed on the day of the visit, 37 percent of those in government facilities reported receiving training in how to conduct a syphilis test, compared with 58 percent of those in non-government facilities.

Figure 4.10 Availability of laboratory staff trained in testing for syphilis, by ownership and facility type



Note: HC IIs are excluded because of small sample size. UHFS 2002

Figure 4.10 shows, among the 46 facilities that had the capacity to conduct a syphilis test, the percentage that had at least one staff member who received in-service training for syphilis testing in the past three years.

For HC IVs, a higher percentage of both government and non-government facilities have laboratory staff who received in-service training in diagnosis for syphilis in the past three years. It is important to note that many lower-level facilities rely on syndromic diagnosis for STIs.

4.2.3 Infection control[1]

"Universal precautions" is a term applied to infection control measures used to prevent cross-infection from blood and body fluids. The infection control measures are to be utilized by all health workers who may come into contact with blood or other body fluids, under the assumption that anyone may have an infectious condition that can be transmitted through these means.

The components of general infection control and universal precautions selected for this survey of facilities, as relevant to the services being assessed, are:

a) High-level disinfection (HLD) practices;
b) Reliable electricity source to operate sterilization equipment;
c) Latrines for client use;
d) Presence in area where injections are administered of

[1] Based on Blumenthal and McIntosh (1996), USAID (1994), and USAID (1997).

1) Soap and water for handwashing;
2) Decontamination solution for immediate immersion of contaminated equipment that will be reused;
3) Puncture-proof covered containers for disposing of needles, blades, or other sharp items (sharps containers) to prevent accidental injury and possible subsequent infection with HIV or hepatitis; and
4) Disposable syringes with needles; and

e) Safe disposal of contaminated (biohazardous) materials.

Administrative capacity to manage infection control is another important part of quality assurance. The UHFS asked questions about the existence of infection control coordinators and committees. Only 31 percent of health care facilities had an infection control coordinator, and 23 percent had an infection control committee. Hospitals fare much better. No hospital was without a coordinator, and only 13 percent were without committees. Most facilities (80%) had not seen the Ministry of Health Infection Control Protocol. Even in district hospitals, 38 percent had not seen the Infection Control Protocol.

4.2.3.1 Capacity to disinfect equipment

For most equipment, either sterilizing or HLD procedures are sufficient to prevent the spread of infection. Dry heat sterilizers, autoclaves (pressurized steam heat), boiling, steaming, and soaking in disinfection solution are all accepted methods, if the appropriate temperature, pressure, and processing time are adhered to. Larger facilities may process equipment at different locations. Where this is the case, this survey assesses the processing for basic outpatient department equipment.

To properly sterilize equipment, the equipment must be cleaned (most often it is soaked in a 0.5 percent chlorine solution for at least 10 minutes to decontaminate after use) and then brush-scrubbed with soap and water. The equipment must then be processed at the proper temperature for the proper time, it must be stored under sterile conditions (dry and stored in sterile wrapping or a sterile or high-level disinfected clasped box), and the date of sterilization should be indicated since the sterility cannot be ensured after one week unless the item is also sealed in plastic.

Most (85%) of the facilities surveyed in Uganda soak medical equipment in a disinfectant prior to final disinfection. The most common method of final disinfecting was boiling (87%), with chemical sterilization being second (12%). At the time of the survey, 7 percent of facilities reported non-functioning disinfection systems. Table 4.7 shows the levels of use of soaking in disinfectant prior to final processing, by ownership and facility type. All hospitals in the country use soaking.

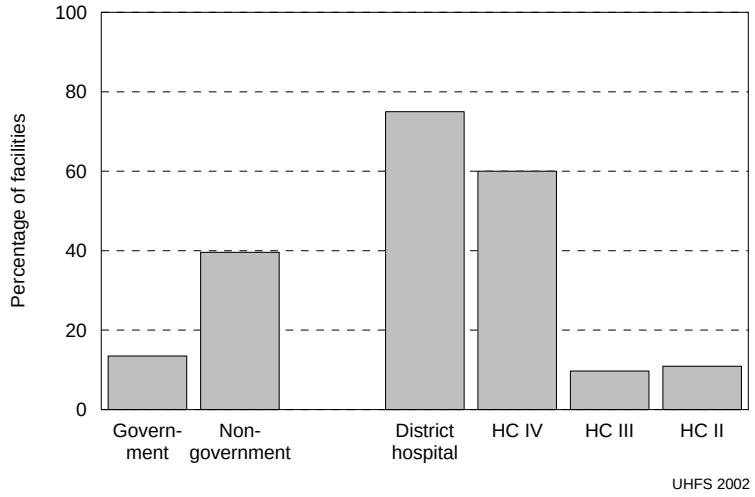
The availability of electricity to power sterilization equipment is critical for operation and varies by ownership and facility type (Figure 4.11). Most hospitals (75%) have electricity.

Table 4.7 Equipment disinfection

Percentage of facilities that soak medical equipment in a disinfectant solution, by ownership and facility type, Uganda Health Facilities Survey 2002

Ownership/ facility type	Medical equipment soaked in disinfectant solution
Ownership	
Government	84.3
Non-government	87.5
Facility type	
District hospital	100.0
HC IV	86.7
HC III	83.9
HC II	84.4
Total	85.0

Figure 4.11 Facilities with electricity available, by ownership and facility type



4.2.3.2 Infection prevention in the service delivery area

To make a reasonable assumption that the provider can wash hands before and after seeing each client, soap and water must be in the immediate vicinity of the area where patients are being seen. Knowing that a facility has water does not provide any indication as to whether it is in a location convenient to service providers. For example, it is unlikely that providers will go to a water pump or tap outside of the building between each client. Because of the frequency with which even inside piped water systems malfunction due to seasonal fluctuations in water or maintenance problems, the presence of soap and water in each of the service areas must be ensured. In addition, the service delivery area must have a sharps container (to decrease injury as well as inadvertent exposure to blood-borne pathogens), five or more disposable syringes with needles, and a container with chlorine-based disinfection solution (for placing reusable contaminated equipment such as speculums, minor surgical equipment) if relevant to the service being provided.

Universal precautions for all facilities is a target of the HSSP. This survey has assessed a subset of universal precautions that includes availability of sharps containers, disposable syringes, soap for handwashing, water for handwashing, soaking contaminated equipment in a disinfectant, and a final process of sterilization or HLD (dry heat, autoclave, steam, boiling, or chemical). The definition included observation or report of existence of the equipment at each facility at the time of the survey. Only 26 percent of the facilities in the country meet these criteria.

Table 4.8 shows the percentage of facilities with sharps containers, disposable syringes, soap and water for handwashing, disinfectant for soaking equipment, and high-level disinfection capacity, by ownership and facility type. Sharps containers were available in 49 percent of facilities; soap was available in 74 percent of facilities. Both government and non-government facilities were likely to have water for handwashing.

Table 4.8 Infection control amenities

Percentage of facilities with sharps containers, disposable needles/syringes, soap, water for handwashing, disinfectant for soaking equipment, and capacity for high-level disinfection available on the day of the survey, by ownership and facility type, Uganda Health Facilities Survey 2002

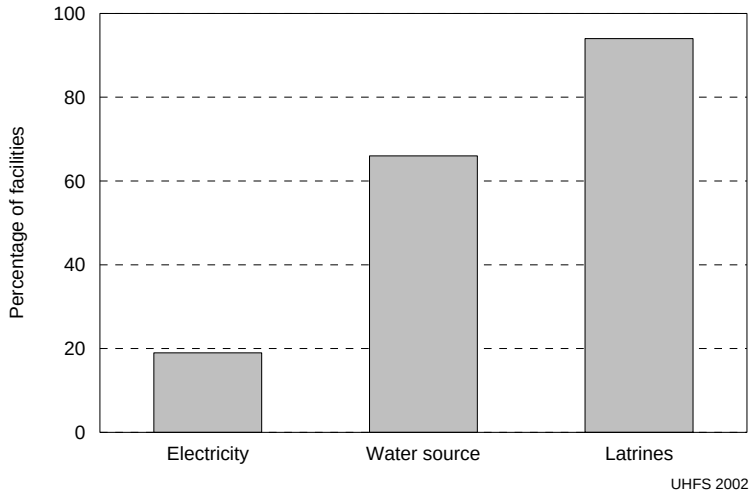
Ownership/ facility type	Sharps container	Syringes	Soap	Water for hand-washing	Disinfectant	High-level disinfection capacity	All needed items for infection control	Number of facilities
Ownership								
Government	51.0	53.6	73.4	79.2	84.9	99.2	24.0	171
Non-government	41.7	95.4	77.1	79.9	85.3	100.0	31.0	55
Facility type								
District hospital	56.9	61.6	100.0	100.0	100.0	100.0	37.7	8
HC IV	72.6	64.3	73.2	91.1	93.8	100.0	34.4	25
HC III	52.5	64.7	76.1	76.1	84.0	99.1	29.2	117
HC II	34.1	62.3	69.4	78.4	82.2	99.4	16.2	76
Total	48.7	63.8	74.3	79.4	85.0	99.4	25.7	226

Soap and water for handwashing, disinfectant, and high-level disinfection were available on the day of the interview in 100 percent of district hospitals. Sharps containers were in use in 57 percent of hospitals.

Less than 40 percent of hospitals have provisions for infection control that stop the spread of infectious diseases, including HIV, as defined here. Non-government facilities were more likely than government facilities to have infection control provisions in place (31% and 24%, respectively). The most common reason that facilities do not meet the infection control criteria used in this survey is that sharps containers were not available in the majority of clinics (51% of facilities).

Availability of electricity, an onsite water source, and functional latrines are general facility accommodations that support infection control. Figure 4.12 shows the percentage of health facilities with electricity, water source, and latrines.

Figure 4.12 Facilities with electricity, water source, and latrines available

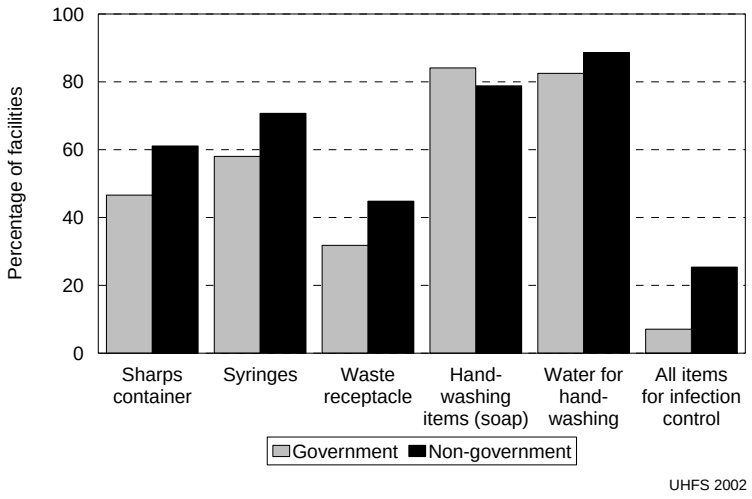


4.2.3.3 Laboratory infection control

When studying the availability of laboratory services, it is necessary to assess the infection control practices and standards of each laboratory facility. Without standard infection control procedures, both clinical staff and patients are at risk of infection. It is important for laboratories to collect blood specimens and dispose of used needles and syringes safely as well as dispose of infectious health care waste safely. At a minimum, all laboratories should have the following: a) a sharps container in order to dispose of used sharps safely, b) disposable needles and syringes, c) waste receptacle with lid and liner, d) soap for handwashing, and e) water for handwashing.

Of the total number of facilities surveyed, 71 reported the capacity to conduct any one of the laboratory tests studied (HIV, TB sputum, and syphilis). Figure 4.13 shows the percentages that had each of these items available on the day of the visit. The chart shows that a greater percentage of non-government facilities have infection control items than the government facilities, except for soap for handwashing. Relatively low levels of facilities had sharps containers and proper waste receptacles available for infection control. At the government facilities, only 7 percent had all items for infection control, and at the non-government facilities, 25 percent had all items for infection control.

Figure 4.13 Laboratory facilities with infection control commodities, by ownership



Although having these items available does not necessarily mean that they are being used routinely or correctly for infection control, it does give an indication of whether staff have the minimum resources to follow standard procedures for infection control.

4.2.3.4 Management and disposal of hazardous health care waste

Hazardous health care waste consists of items such as soiled bandages, used needles, syringes that may be contaminated by blood, or other biological waste that might be infectious if touched. The most effective means for disposal is incineration and subsequent burial of the remains. Burying items in deep pits is also an effective means of disposal. The most important issue to be assessed is whether there is a process for disposal that eliminates the possibility of contamination through contact. If the waste is visible and not protected from people or animals, either prior to or after processing, this increases the chances that people can inadvertently come in contact and risk subsequent infection.

The UHFS looked at both the management of hazardous health care waste in the health facility, as well as final disposal. About one-fourth of facilities stored their infectious waste in a firmly covered bin prior to disposal (27%), while 29 percent of all facilities stored this waste in an open but protected bin. Thirty percent of facilities stored infectious waste in another non-protected area prior to final disposal. This potentially leaves both staff and clients exposed to infection through contact with this hazardous waste.

Methods of final health care waste disposal include incineration, burning in an open pit, burning and burying, burying, disposing in a pit latrine or an open pit, and transporting waste off site to a municipal dump. According to the survey, the most common mode of disposal of infectious health care waste was burning in an open pit (55% of all facilities), followed by disposal in an open pit (31%). In 58 percent of facilities, at all levels and particularly at district hospitals (75%), this waste was visible and was not properly protected. In only 24 percent of all facilities was there no waste visible around the health facility site. Again, if the location of final disposal of infectious health care waste is not secured, staff, clients, and the surrounding community are potentially at risk of infection through contact with this waste.

4.2.3.5 Management and disposal of sharps

Proper management and disposal of sharps (such as needles and blades) in a clinical setting is also key to infection control. The UHFS asked a series of questions about the handling of sharps and their disposal after use, including their handling before disposal, the use of sharps containers, and final disposal of sharps containers. The majority of health facilities in Uganda separate the needle from the syringe before disposing of the needle (59%). This practice is commonly used at both government and non-government facilities and in all facility types. Thirty-six percent of facilities disinfect the needle prior to disposal and 21 percent do nothing.

For disposal in the clinical setting, more facilities discard the needles into a non-sharps container (55%) than use a properly designated sharps container (41%). Once the sharps containers are full, 20 percent of all facilities store them in a secure location with limited access prior to final disposal, while 13 percent store them in a secure location that has open access. The most commonly used method for final disposal of used sharps containers is to burn them in an open pit (21% of all facilities), while throwing them into a pit latrine was the second most common method of final disposal (11% of all facilities). Only district hospitals used municipal dumps to any extent (13%).

According to the WHO *Safe Management of Wastes from Health-Care Activities* (1999), for the complete destruction of needles through burning, temperatures must reach at least 800–900 degrees Celsius, which is unlikely in a standard open pit fire. In order to properly destroy the sharps, specially designed incinerators are an option. There are several types of incinerators, including single chamber, double chamber (pyrolytic), and rotary kiln. For high temperature incinerators that specifically treat health care waste, the average temperature needs to reach 900–1200 degrees Celsius, and for medium temperature incinerators, the average temperature needs to reach 800–900 degrees Celsius for the combustion process. At the time of the survey only 3 percent of all facilities were burning sharps in a proper incinerator, almost exclusively at the district hospital and HC IV levels (13% of government hospitals at the district level, no government HC IVs, and 44% of non-government HC IVs).

Contaminated health care waste, including used sharps, must be properly handled in a clinical setting to ensure the safety of staff, clients, and the surrounding community at all times.

Chapter 5

Commodity, Equipment, Training, and Services Availability

This chapter combines information on the availability of commodities, equipment, trained staff, and services in an effort to evaluate the actual availability of services provided in health care facilities in the country. The services evaluated include voluntary counseling and testing (VCT), prevention of mother-to-child transmission (PMTCT), management of opportunistic infections (OI), treatment of sexually transmitted infections (STI), tuberculosis diagnosis (TB Dx), and tuberculosis treatment (TB Rx). Evaluation criteria are established to evaluate the availability of services by assessing the presence of recently trained staff and availability of commodities and equipment necessary for service provision and laboratory diagnosis. The next section defines the evaluation criteria used in this chapter. The remainder of the chapter examines each of the service areas of this study and evaluates a number of aspects of service availability.

5.1 Definitions of evaluation criteria

This section establishes evaluation criteria for health services for two aspects of each service: training of staff and availability of commodities and equipment necessary to offer the service. The evaluation criteria set for use in this chapter are not definitive. This issue will be discussed in Section 5.7, Limitations.

Training is measured by the percentage of facilities that have at least one staff member who works in each service area and received in-service training related to each service within the past 3 years. In service areas where laboratory capacity is required (VCT, PMTCT and TB diagnostic services), the reported percentage includes only facilities that also have at least one laboratory staff person who received in-service training in the last three years in laboratory diagnosis using (where applicable) HIV test kits or TB sputum testing procedures.

The minimum amounts of commodities and equipment that a facility requires to provide each service, as defined in this chapter, are listed below. Caveats for these definitions are discussed at the end of the chapter.

For **VCT/PMTCT services**, a facility must have at least 2 HIV test kits available for use. In addition, the facility must have a functioning refrigerator to store certain HIV test kits.

For **OI services**, a facility must have any stock of any one of the drugs that the survey looked at for the treatment of OIs on the day of the visit. These drugs include fluconazole (Diflucan), co-trimoxazole (Septrin), and acyclovir (Zovirax/Cyclovax).

For **STI services**, a facility must have any stock of any one of the drugs that the survey looked at for the treatment of STIs on the day of the visit. These drugs include ciprofloxacin (Cipro), benzathine penicillin, doxycycline and metronidazole (Flagyl). Although laboratory equipment are helpful for STI diagnostic services, the laboratory capacity is not included in the parameters here. This is due to the fact that, in practice, many facilities use syndromic diagnosis for STIs.

For **TB diagnostic services**, a facility must have a functioning microscope and slides on the day of the visit. The reagents were not included as a requirement. While it is recognized that

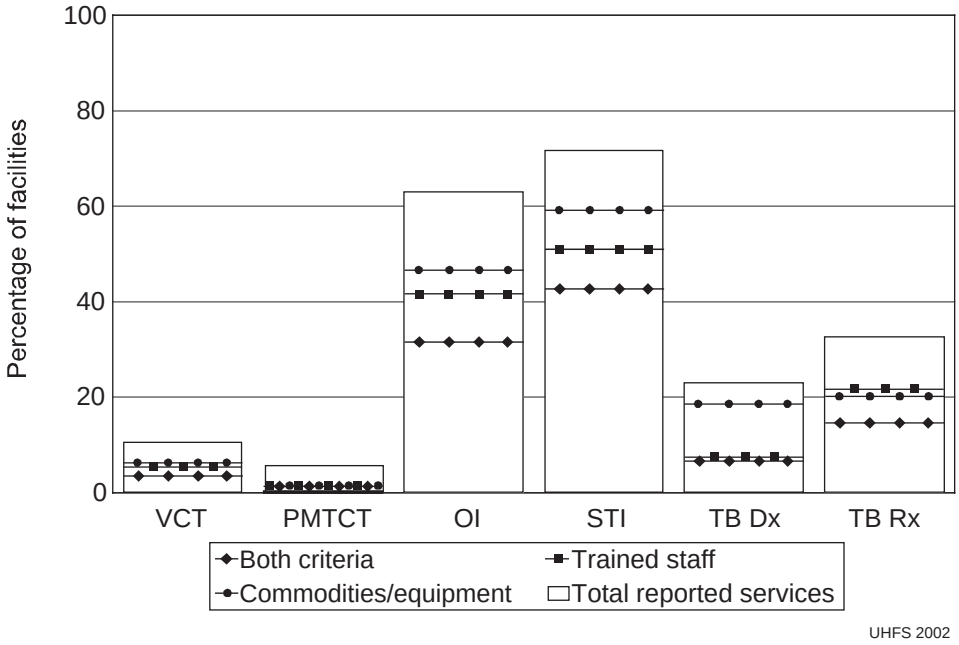
reagents are needed to conduct TB sputum tests, there was too wide a variety of reagents to select one indicator reagent.

For **TB treatment services**, a facility must have any stock of the TB treatment blister pack, which the survey looked at for the treatment of TB on the day of the visit.

5.2 Availability of trained staff and commodities/equipment for selected services

Figure 5.1 shows the proportion of all health care delivery facilities in the country that have services related to HIV, STIs, and TB, based on the evaluation criteria for services defined above. The lines on the bars indicate the actual availability of these services in Uganda.

Figure 5.1 Evaluation criteria for HIV/AIDS support services (all facilities)



The bars in Figure 5.1 show the percentage of all facilities visited that reported offering each of the specified HIV/AIDS support services. The proportion of facilities reporting each service is the same as that shown in Figure 4.1. Again, more than half of the facilities n the country reported that OI and STI services are available. TB diagnosis and treatment were reported available in approximately one-third of the facilities, while VCT and PMTCT services were reported available in only a small proportion of facilities.

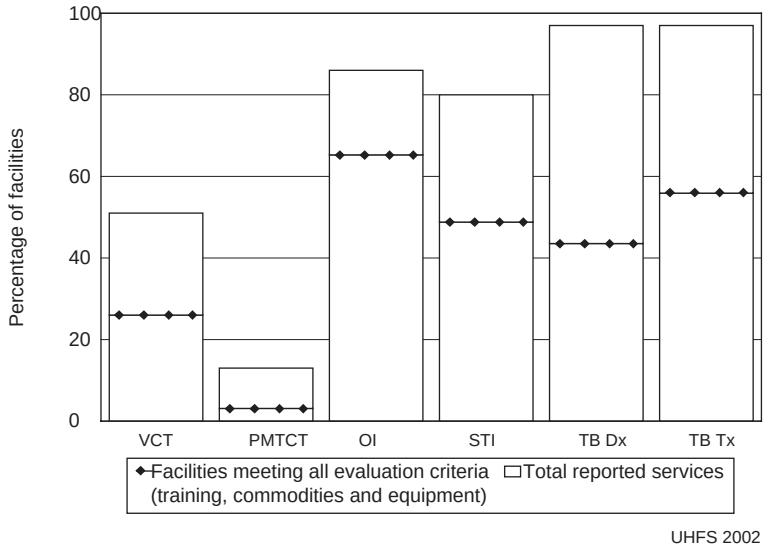
The lines with squares represent the percentage of facilities that have a staff member trained to offer that service. The majority of facilities offering OI, STI, and TB treatment services have a staff member trained to offer that service, while less than half of the facilities offering PMTCT and TB diagnosis and half of those offering VCT services have a staff member trained to offer that service.

The lines with circles represent the percentage of facilities that have the commodities and equipment necessary to offer each service on the day of the survey. At least 50 percent of the facilities reporting that they offer VCT, OI, STI, TB diagnosis and TB treatment services also had the commodities and equipment needed to offer the service on the day of the visit, while those that reported offering PMTCT services generally lacked the necessary commodities and equipment.

Finally, the lines with diamonds show the percentage of facilities with both trained staff and the commodities and equipment needed to offer the services, in other words, the requirements to meet the evaluation criteria to offer each service. Without trained staff and the required commodities and/or laboratory equipment needed to provide the service, the facilities are not, in fact, able to offer the service. Approximately half of the facilities that reported offering OI, STI, and TB treatment services meet these criteria, although only a minority of the facilities reporting that they offer the other services meet these criteria.

Figure 5.1 shows coverage for HIV/AIDS services considering all facilities. As such, we can say that HC IIs and HC IIIs pull down the averages. If we define national coverage by services available at the district and HSD levels (district hospitals or HC IVs), the picture in the country greatly improves. Figure 5.2 shows the proportion of district hospitals and HC IVs (located in urban and semi-urban areas) that report offering each service. The line in the bar represents the proportion of those facilities that meet all criteria (training, commodities, and equipment) as defined in this section. For example, VCT services are reported to be available in half of the district and HC IV facilities. However, the evaluation criteria to offer services (trained staff and usable HIV test kits) are available in only about half of those facilities. The implication of this analysis is that the services are much more likely to be available in urban and semi-urban areas (district hospitals and HC IVs) than in rural areas (HC IIs and HC IIIs).

Figure 5.2 Evaluation criteria for HIV/AIDS support services (district hospitals and health center IVs)



5.2.1 Voluntary counseling and testing

VCT services are available in 11 percent of the health care facilities in the country. The evaluation criteria to offer VCT services are defined by the presence of at least one clinical staff member trained in VCT, at least one laboratory technician trained in HIV testing, a minimum of two usable HIV test kits, and a functioning refrigerator. Of the facilities that offer VCT services, half have trained staff; 95 percent have trained staff to provide VCT, and 52 percent have trained laboratory staff. HIV testing kits and functioning refrigerators are available in 56 percent of the facilities that offer VCT services. The criteria for offering services (trained staff and commodities/equipment) are available in one-third of these facilities.

Table 5.1 describes the criteria for offering VCT services by facility level. Over 60 percent of district hospitals and HC IVs have both trained clinical and laboratory personnel to support VCT services. Commodities (test kits) and functioning refrigerators were observed in 39 percent of hospitals and 77 percent of HC IVs.

Table 5.1 VCT services

Percentage of facilities offering VCT services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Trained laboratory technician	Trained staff in service and lab	HIV test kits	Functioning fridge with power	Both commodities and equipment	All components	Number of facilities
District hospital	100.0	61.1	61.1	38.9	100.0	38.9	0.0	4
HC IV	93.1	64.8	61.3	77.1	100.0	77.1	51.4	15
HC III	*	*	*	*	*	*	*	*
Total	95.6	51.7	49.5	61.7	80.8	55.9	32.9	24

Note: An asterisk indicates that a figure is based on too few cases to show and has been suppressed.

According to the HSSP, all HC IIIs and above will provide VCT. As shown by the table above, four of the eight district hospitals reported that they do not provide VCT services. When looking at the evaluation criteria defined earlier in this chapter, 51 percent of the HC IV facilities meet the evaluation criteria. All of the HC III facilities visited have staff trained in HIV counseling, but none has staff trained in laboratory testing for HIV. Therefore, at the time of the survey, none of the HC III facilities was able to provide comprehensive VCT services. To meet the 2005 goals, a significant amount of resources will need to be committed to training and commodity and equipment procurement and distribution.

5.3 Prevention of mother-to-child transmission

PMTCT services are not yet widely available in Uganda; only 6 percent of the health care facilities visited during the survey provide PMTCT. This small number of facilities makes it difficult to offer detailed analysis of the criteria for this service. The evaluation criteria for offering PMTCT services, as defined here, include the presence of at least one clinical staff member trained in PMTCT, one laboratory technician trained in HIV testing, at least two usable HIV test kits, and a functioning refrigerator. Fewer than 8 percent of facilities providing PMTCT services have all the necessary components.

Table 5.2 describes the criteria for offering PMTCT services at all health care facilities that reported offering the service.

Table 5.2 PMTCT services

Percentage of facilities offering PMTCT services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Trained laboratory technician	Trained staff in service and lab	HIV test kits	Functioning fridge with power	Both commodities and equipment	All components	Number of facilities
HC IV	*	*	*	*	*	*	*	*
HC III	*	*	*	*	*	*	*	*
Total	68.0	19.7	7.5	7.5	23.7	7.5	7.5	12

Note: An asterisk indicates that a figure is based on too few cases to show and has been suppressed.

Although there are no specific PMTCT targets outlined in the HSSP, it is interesting to note that, given the evaluation criteria set in this chapter, less than 10 percent of facilities can currently provide PMTCT services.

5.4 Treatment of opportunistic infections

OI treatment services are available in 63 percent of health care facilities in the country. Trained staff were found in 66 percent of facilities. At least one of the drugs to treat an OI was found in 74 percent of facilities. The evaluation criteria (trained staff and commodities) were present in half of the facilities reporting that they provide OI management.

Table 5.3 shows the criteria for OI treatment services by facility type. While most district hospitals had trained staff, only 59 percent of the HC IIs had such staff. Almost 80 percent of hospitals that reported offering the service had all components necessary for providing OI treatment; 60 percent of HC IVs, 52 percent of HC IIIs, and 37 percent of HC IIs had the necessary components.

Table 5.3 OI treatment services

Percentage of facilities offering OI treatment services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Commodities availability	All components	Number of facilities
District hospital	95.0	84.3	79.4	6
HC IV	73.1	85.7	59.8	21
HC III	66.5	78.4	52.0	72
HC II	58.8	59.6	37.3	42
Total	66.4	74.1	49.9	142

In OI management, the HSSP's goal is "effective management of STIs and OIs at all health units" in the country by 2005 (MoH, 2000). For a different look at the facilities that reported providing the services, there are target shortfalls at every level of the system. In other words, 25 percent at the district hospitals, 16 percent of the HC IVs, 38 percent of the HC IIIs, and 45 percent at HC IIs reported that they do not offer any OI services.

5.5 STI diagnosis and treatment

Over 70 percent of health care facilities in the country provide services for treating STIs: 67 percent of government facilities have STI services, compared with 86 percent of non-governmental facilities. Trained service providers are found in 71 percent of all facilities. Eighty-two percent of facilities had available at least one of the drugs to treat an STI. Both staff and commodities are found in 60 percent of facilities. If the criteria for offering STI services are judged by the ability to provide laboratory diagnosis for syphilis, the proportion of facilities with STI services is less than 2 percent.

Table 5.4 shows the evaluation criteria for offering STI services by facility type. Trained staff and at least one of the drugs to treat STIs are available in 61 percent of district hospitals that reported offering STI services. HC IVs, HC IIIs, and HC IIs meet the evaluation criteria for services (trained staff and commodities) in 58 percent, 65 percent, and 50 percent, respectively, of facilities that reported providing STI services.

Table 5.4 STI services

Percentage of facilities offering STI services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Trained laboratory technician	Laboratory capacity	Commodities availability	Equipment availability	Trained service provider and commodities	All components	Number of facilities
District hospital	76.1	28.4	96.5	84.7	28.4	60.8	28.4	6
HC IV	65.8	43.0	77.3	91.3	50.7	58.2	7.0	21
HC III	79.4	3.9	12.2	81.3	7.6	65.3	0.3	84
HC II	59.3	6.1	8.8	79.8	5.9	50.1	0.0	50
Total	71.2	10.7	23.0	82.3	13.5	59.5	2.2	162

As mentioned in the previous section, the HSSP objective is to provide STI management at all health units in the country. A number of facilities reported that they do not provide STI services. Of the eight hospitals visited, two, or 25 percent, reported that they do not offer STI services, and 16 percent of HC IVs, 28 percent of HC IIIs, and 50 percent of HC IIs reported that they do not offer STI services.

5.6 Tuberculosis diagnosis and treatment

Tuberculosis (TB) diagnosis is offered in 23 percent of health care facilities in the country and treatment in 31 percent. There are small differences between government and non-government facilities. Table 5.5 shows that only one-third of facilities that offer TB diagnostic services facilities have trained staff for diagnosis (clinical and laboratory). Certain minimum equipment for conducting a TB sputum test (microscope and slides) were found in 80 percent of facilities. Both staff and equipment are found in 28 percent of facilities. In facilities that provide TB treatment, the picture is somewhat better. Trained staff for treatment were found in 66 percent of facilities with treatment services. TB drugs were found in 62 percent of these facilities (Table 5.6).

Table 5.5 TB diagnostic services

Percentage of facilities offering TB diagnostic services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Trained laboratory technician	Trained staff in service and lab	Equipment available	All components	Number of facilities
District hospital	100.0	52.1	52.1	100.0	52.1	8
HC IV	58.1	72.8	41.1	97.5	38.6	20
HC III	67.4	36.8	24.1	57.5	14.1	23
Total	69.7	51.3	33.7	80.0	28.3	52

Table 5.6 TB treatment services

Percentage of facilities offering TB treatment services that meet specific criteria for offering services, by facility type, Uganda Health Facilities Survey 2002

Facility type	Trained service provider	Commodities availability	All components	Number of facilities
District hospital	95.0	47.0	42.0	8
HC IV	76.1	77.3	62.2	23
HC III	62.1	61.7	42.9	34
HC II	24.3	23.9	0.0	7

Total	66.6	61.6	45.0	70

Over half of the district hospitals that provide diagnostic services for TB have both trained staff and laboratory equipment. For HC IVs, almost 40 percent were observed to have the same level of service. For HC IIIs, 14 percent of facilities offering TB diagnosis had trained staff and laboratory equipment. The evaluation criteria for offering TB treatment services (trained staff and TB commodities) were available in 42 percent of district hospitals, 62 percent of HC IVs, and 43 percent of HC IIIs that reported offering TB treatment (Table 5.6). HSSP 2005 targets include 100 percent national coverage for community-based DOTS, with an 80 percent cure rate.

5.7 Limitations

This chapter defines criteria to evaluate training and the availability of commodities and equipment, for the purpose of judging facilities' capacity to offer the services that they report offering. There are a number of limitations or caveats that need to be discussed to fully appreciate the implications of this analysis. Health care quality measures are complex and have not been standardized. The measure of quality could have been more or less stringent. The above criteria required in-service training in the past three years, but more stringent criteria could have been applied. It can be argued that HIV treatment protocols are rapidly changing and more frequent in-service training should be the minimum standard to evaluate the ability of the available staff to offer these services. In addition, it must be pointed out that training does not guarantee quality of service.

The criterion used to evaluate drug availability was also very relaxed, defined as any drug on the shelf to treat any opportunistic infection or sexually transmitted disease. This definition does not provide for treatment of all or even of most OIs and STIs. One pill of doxycycline meant a facility qualified under the evaluation criteria. In fact, one pill of doxycycline is not adequate treatment for any STI. However, some of the drugs for STIs studied in this survey are single-dose regimens. This definition does not reflect the reality that sufficient stocking requires calculations of the average duration of treatment for each drug. The definition of commodity availability used here is therefore very loose; it underestimates the complexity of keeping drug supplies available in clinics and does not represent facilities' actual ability to treat all STIs.

Availability of health commodities in facilities must also be interpreted in relationship to their availability outside of these clinics, that is, in commercial pharmacies. Our measure of the availability of services assumes that the facility must provide the drug. In fact, the facility may provide the patients with prescriptions and the patient may purchase drugs in commercial pharmacies. While this study does not evaluate pharmacies, pharmacies are believed to stock adequate stores of drugs. Commercial pharmacies are present in all towns in the country. Therefore, some may consider the measure used in this chapter too stringent. Additional barriers to the availability of health commodities in Uganda need to be studied in order to sufficiently measure the availability and quality of HIV/AIDS services.

Regarding the criteria for HIV testing, a caveat should be mentioned. The criteria used in this chapter require the availability of at least two HIV test kits. This assumes that, in the case of discordant test results, the patient would be referred to another facility that can perform a tie breaker test. World Health Organization criteria for two rapid tests also require that the tests measure different parts of the antibody. In practice, it is understood that some centers in Uganda relax this standard and use two rapid tests of the same type. Some may therefore suggest that the figures presented here overestimate facilities' capacity to provide VCT and PMTCT services. Also, the HIV testing criteria used here require a working refrigerator, as many of the current rapid test kits in use in the country require refrigeration. Rapid test kits that do not need to be refrigerated may soon make quality rapid HIV testing possible for facilities without refrigerators.

The criteria for tuberculosis diagnosis used in this chapter require a microscope and slides. In fact, stains are also necessary for laboratory diagnosis of tuberculosis. Because laboratories in Uganda use a great variety of stains, it was not possible to select one stain to serve as an indicator. As such, the evaluation criteria for the diagnosis of tuberculosis used in this chapter may overestimate capacity.

Despite these caveats, the evaluation criteria used in this chapter give a summary measure of overall availability of services in the country and point the direction for more complex analysis of the results of these data.

Chapter 6

Conclusions and Recommendations

6.1 Health Commodity Management and Logistics System Performance

6.1.1 Conclusions

1. The frequency of stockouts in the public sector is high, including full-supply products. These stockouts include critical drugs required for contraception, disease prevention, and treatment of sexually transmitted infections (STIs), tuberculosis (TB) and other infectious diseases.

2. Commodity availability in the public sector is inconsistent and insufficient. The data on levels of stock on hand show that inventory management practices have led to over- and understocked facilities. This can lead to stockouts and product wastage through expiration and facilities' inability to meet client needs.

3. Product loss due to expiration is low because products are in short supply and consumed before expiration.

4. Health commodity security is additionally threatened by inadequate record keeping and information systems. Low levels of actual use of stock cards indicate that stock managers are not properly monitoring their stock levels and cannot, therefore, make informed decisions. Regular reporting of this information is critical for making logistics decisions at each level of the supply chain. Access to this data at all levels of the logistics system will increase product availability by improving the system's efficiency.

5. The district warehouses do not maintain large quantities of health commodities in stock and primarily serve as a pass-through point from National Medical Stores (NMS) at the central level to the storerooms at health sub-districts (HSD). The survey teams found that health centers were within a reasonable distance from the HSDs to be able to pick up supplies on a regular schedule.

6. Additional staff are needed at all levels, including laboratories. According to the Health Sector Strategic Plan (HSSP), human resources for health are "both inadequate in numbers, and… inappropriately distributed" (MoH, 2000). The survey reinforced these concerns and also highlighted the lack of training and inadequate skills in commodity management among the staff.

7. Performance improvement interventions in logistics management are needed to ensure a smooth transition to a pull system. In light of the quickly changing Ministry of Health logistics system, the information and processes taught to these staff may be inconsistent or outdated, particularly for ordering and inventory management. Standardized training in logistics practices is crucial to ensure proper inventory management and, again, to ensure that the clients' needs are met.

8. Because routine supervision is taking place, it can be used as a tool for monitoring logistics system performance in order to resolve problems quickly and for performance improvement interventions for staff.

6.1.2 Recommendations

1. Improve product availability by collecting key logistics data through the health management information system (HMIS).

This information is needed to evaluate and justify orders placed, for example, by comparing the quantities ordered to service statistics. To ensure that the logistics data needed to make forecasting, ordering, and procurement decisions is collected through the existing information system, the commodity order forms should be redesigned to include stock on hand at the facility level. Since the survey was conducted, the order forms have been reworked, in part due to the preliminary findings from this survey.

2. Analyze data collected through the HMIS and use this data for decisionmaking at the central level (e.g., for forecasting and procurement).

At present, the data are not systematically collected and analyzed at the central level. As NMS takes over forecasting and procurement functions for health commodities, they will need logistics data to forecast future needs. The MoH will also need this information for budgeting purposes.

3. Establish protocols for transferring overstocked commodities and disposing of expired products.

On the survey's preliminary recommendation to schedule a national "dejunking" of warehouses and health centers, this has been scheduled for 2003. Protocols should be established to create a mechanism for facilities to transfer stocks between facilities to avoid stock imbalances.

4. Decentralize the transportation of health commodities.

NMS and the MoH should investigate the cost-benefit of delivering supplies directly to the HSD level, rotating through districts every two months. DELIVER carried out a cost study in December 2002 to evaluate this option. Detailed findings are available from DELIVER.

5. Establish a human resources plan to identify staff needs and funding to meet the needs.

Staff shortages have affected product availability, reporting, and overall logistics system performance.

6. Create a performance improvement plan of action for logistics management to ensure commodity security and quality of care.

This can be done mostly through on-the-job training and during supervision visits by reinforcing good commodity management practices. This should include an added emphasis on monitoring and evaluation of logistics activities and system performance. Supervisory visits should be used as a cost-effective means of reinforcing skills and for on-the-job training of staff on new guidelines, policies, and technologies. Job-aids can help supervisors to train staff. The following are specific areas where capacity building is needed to ensure a smooth transition to the pull system:

- filling out HMIS and order forms for all staff

- inventory control and stock management for all staff
- quantifying needs and placing orders for staff at the lower levels
- reviewing stock data on order forms to evaluate orders and to redistribute stock (if needed) for staff at the HSD and district levels
- consolidating orders for staff at the HSD and district levels
- financial management for staff at the HSD and district levels

6.2 Service Provision

6.2.1 Conclusions

1. The Health Sector Strategic Plan lays out a number of important goals for 2005. This survey measures progress towards those goals. For the goals that can be evaluated by this study, most of the facilities are far from reaching the target.

2. Training remains an important challenge, especially in the areas of clinical care (such as HIV) that are rapidly changing. There is a need for in-service training in all areas of HIV, STI, and TB services.

3. Availability of services is strong at the district level but weak in smaller facilities (HC II and III). New services such as voluntary counseling and testing (VCT) and prevention of mother-to-child transmission (PMTCT) exist at very few of the smaller facilities. Even for long-standing programs like tuberculosis treatment and control, most small facilities do not provide the service.

4. While this study provides a national picture of provision of care in the government and non-government health care delivery system, it does not study utilization of services. Commercial pharmacies provide medication, especially in urban areas, but were not reported on in this study. Access to medication through these pharmacies should improve the picture provided by this report. However, serious financial barriers to the purchase of medications and commodities are thought to exist in Uganda.

5. In many cases, laboratory staff indicated to the data collectors that their choice of test kit was dependent on what was available and not on any written protocols.

6. Universal precautions for infection control are not being followed in most health care facilities.

6.2.2 Recommendations

1. Serious efforts to improve quality of care and access to care for deadly and highly prevalent infectious diseases such as syphilis and tuberculosis should receive the highest priority as the country moves towards development of the health system and health care reform.

While extending PMTCT and anti-retroviral therapy to the population of Uganda are important needs, deadly and debilitating diseases like syphilis and tuberculosis are also endemic and under-treated in the country.

2. Policy guidelines for the provision of VCT and PMTCT services must be established.

This includes the selection of HIV test kits and anti-retroviral drugs and the development of protocols for their distribution and management (with consideration for electricity and refrigeration limitations).

3. Laboratory capacity to manage and conduct the tests to support these services will also need to be improved.

4. Service providers will need to be trained in the provision of these services, which involve new protocols and procedures and require new skills.

6.3 Commodity Management and Service Provision: Summary Conclusions

Following a comprehensive analysis of the information gathered during the survey, bringing together the commodity management and service provision sections of the survey, some general conclusions can be drawn about the overall ability of health facilities in Uganda to offer the HIV/AIDS support services as presented in this report.

The tables presented in Chapter 5 for each service show the percentage of facilities that meet each of the criterion applied here and then all of the criteria by type of facility. Overall, HIV/AIDS services were found to be very limited at the time of the survey. Both VCT and PMTCT are currently only available at district hospitals and HC IVs, and few facilities at those levels meet all of the criteria. These services are still being rolled out in Uganda and have not yet been widely implemented.

For OI treatment services, it is clear that facilities at the higher levels are much more likely to meet these criteria and are more capable of providing these services to clients. Ultimately, this means that a large proportion of the rural population will have to go to urban and semi-urban areas to receive treatment for OIs.

STI treatment services are more widely available than the other services at all levels, but still fall far short of the goal laid out in the HSSP of universal service coverage. Although STI commodity availability appears high, it is important to note that this is mostly due to high levels of co-trimoxazole found, while the other STI drugs were not available in the majority of facilities on the day of the survey. Furthermore, as a common antibiotic, co-trimoxazole is distributed through the essential drug kits, which were being distributed during the survey and may have contributed to the high stock levels.

All components for offering diagnostic services for TB were more widely available at the district hospitals than other facilities, although 52 percent is still insufficient for increasing TB case notification rates as specified in the HSSP. The results for TB treatment services show that health facilities have a long way to go to reach the Government of Uganda's goals. The additional funds that are anticipated from the GFATM should help with this effort.

Overall, facilities at the district and health sub-district (HC IV) levels were much more likely than other facilities to be able to offer these services based on the criteria laid out in Chapter 5. Including the lower level facilities pulls down the overall results. This means that people in rural areas have to travel to an urban or semi-urban area to access most of these services.

Only a small proportion of staff had received training in each of the areas studied: commodity management, service provision, and laboratory diagnostics. Although the results presented in Chapter 5 look at the availability of at least one staff member who had been trained in each area, the rates are very low for many service areas. Facilities cannot manage these commodities, offer these services, or perform these laboratory tests if they do not have staff who have been trained to do so.

Supervision is taking place in all the areas studied and can be used as an opportunity for on-the-job training and performance monitoring.

Infection control was identified as a serious problem, with few facilities having the necessary provisions or taking proper actions to promote infection control and to properly dispose of infectious health care waste.

Reported laboratory capacity was high at hospitals and HC IVs, although there was limited availability of HIV test kits and other laboratory equipment needed to actually offer these services. Laboratory services require a combination of trained staff, commodities, and equipment at all levels, and the correct combination was not often found.

Reported service availability was high at the district and HSD levels, although availability of certain commodities was somewhat low at these levels. Conversely, reported service availability for STIs and OIs was lower at the lower-level facilities, but availability of certain commodities was higher at these levels. For example, there was higher reported VCT service availability at hospitals and HC IVs than other facilities, but few HIV test kits were available. More facilities reported offering STI and OI treatment services at higher levels than at lower levels. However, for many STI drugs, stockout rates over the six-month period were higher for higher-level facilities than for lower-level facilities. Furthermore, availability of certain STI and OI drugs on the day of the survey, such as ciprofloxacin, benzathine penicillin, and co-trimoxazole, was slightly higher at the lower levels, where fewer facilities reported the capacity to offer the service. This is positive in terms of reaching the broadest base of clients with the drugs that they need, but providers must also be trained at the lower levels to offer the services.

This is not the case for TB blister packs, however; many more facilities reported both service availability and stock availability of blister packs at the higher levels. Family planning and malaria treatment services were not studied and are therefore not included in this analysis.

In sum, there is a disconnect between service and commodity/equipment availability. Anecdotally, the data collectors heard frustration from many service providers who had been trained but had no products to offer the service and felt they were losing their skills. Likewise, the data collectors heard from other staff who had not yet been trained to offer the services but wanted to, because they had clients requiring or requesting these services. All of the components discussed here—trained staff, availability of health commodities, and laboratory equipment—must be present at a minimum for quality health services to be offered to the population of Uganda.

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Appendix A

Selected Estimates of Sample Errors

Table A.1 Selected estimates of sample errors

Estimate name	Denominator	Strata	Esti-mate	Sample size	Sample error	Relative error	95% Confidence Interval Low Bound	95% Confidence Interval Upper Bound
All infection control commodities and equipment available	All facilities	Government	0.071	46	0.0420	59.1	0.000	0.155
All infection control commodities and equipment available	All facilities	Non-government	0.254	25	0.0965	38.0	0.061	0.447
All infection control commodities and equipment available	All facilities	District hospital	0.403	8	0.1922	47.7	0.019	0.787
All infection control commodities and equipment available	All facilities	HC IV	0.142	23	0.0807	56.8	0.000	0.303
All infection control commodities and equipment available	All facilities	HC III	0.052	32	0.0435	83.6	0.000	0.139
All infection control commodities and equipment available	All facilities	HC II	0.200	8	0.1567	78.4	0.000	0.513
All infection control commodities and equipment available	All facilities	Total	0.135	71	0.0449	33.3	0.045	0.225
Laboratory capacity for testing HIV	All facilities	Government	0.092	171	0.0245	26.6	0.043	0.141
Laboratory capacity for testing HIV	All facilities	Non-government	0.189	55	0.0585	31.0	0.072	0.306
Laboratory capacity for testing HIV	All facilities	District hospital	0.794	8	0.1585	20.0	0.477	1.000
Laboratory capacity for testing HIV	All facilities	HC IV	0.696	25	0.1019	14.6	0.492	0.900
Laboratory capacity for testing HIV	All facilities	HC III	0.006	117	0.0079	131.9	0.000	0.022
Laboratory capacity for testing HIV	All facilities	HC II	0.021	76	0.0182	86.8	0.000	0.057
Laboratory capacity for testing HIV	All facilities	Total	0.116	226	0.0236	20.3	0.069	0.163
Laboratory capacity for testing syphilis	All facilities	Government	0.153	171	0.0305	19.9	0.092	0.214
Laboratory capacity for testing syphilis	All facilities	Non-government	0.369	55	0.0721	19.5	0.225	0.513
Laboratory capacity for testing syphilis	All facilities	District hospital	0.972	8	0.0646	6.6	0.843	1.000
Laboratory capacity for testing syphilis	All facilities	HC IV	0.711	25	0.1005	14.1	0.510	0.912
Laboratory capacity for testing syphilis	All facilities	HC III	0.140	117	0.0355	25.4	0.069	0.211
Laboratory capacity for testing syphilis	All facilities	HC II	0.058	76	0.0297	51.2	0.000	0.117
Laboratory capacity for testing syphilis	All facilities	Total	0.205	226	0.0298	14.5	0.145	0.265
Facilities with stockout of co-trimoxazole	Facilities that report managing co-trimoxazole	District hospital	0.800	6	0.1810	22.6	0.438	1.000
Facilities with stockout of co-trimoxazole	Facilities that report managing co-trimoxazole	HC IV	1.000	25	0.0000	0.0	1.000	1.000
Facilities with stockout of co-trimoxazole	Facilities that report managing co-trimoxazole	HC III	0.973	114	0.0168	1.7	0.939	1.000
Facilities with stockout of co-trimoxazole	Facilities that report managing co-trimoxazole	HC II	0.933	71	0.0329	3.5	0.867	0.999

(continued)

Table A.1 *(continued)* Selected estimates of sample errors

Estimate name	Denominator	Strata	Esti-mate	Sample size	Sample error	Relative error	95% Confidence Interval Low Bound	95% Confidence Interval Upper Bound
Facilities with stockout of co-trimoxazole	Facilities that report managing co-trimoxazole	Total	0.948	225	0.0164	1.7	0.915	0.981
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	District hospital	0.807	7	0.1653	20.5	0.476	1.000
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	HC IV	0.962	24	0.0432	4.5	0.876	1.000
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	HC III	0.902	106	0.0320	3.5	0.838	0.966
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	HC II	0.778	59	0.0600	7.7	0.658	0.898
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	Government	0.841	154	0.0327	3.9	0.776	0.906
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	Non-government	0.925	51	0.0409	4.4	0.843	1.000
Facilities with stockout of benzathine penicillin	Facilities that report managing benzathine penicillin	Total	0.860	205	0.0269	3.1	0.806	0.914
Staff interviewed who received in-service training in past 3 years for VCT	Facilities offering VCT service	Non-government	1.000	12	0.0000	0.0	1.000	1.000
Staff interviewed who received in-service training in past 3 years for VCT	Facilities offering VCT service	Government	0.908	11	0.0966	10.6	0.715	1.000
Staff interviewed who received in-service training in past 3 years for OI	Facilities offering OI service	Non-government	0.660	105	0.0512	7.8	0.558	0.762
Staff interviewed who received in-service training in past 3 years for OI	Facilities offering OI service	Government	0.676	37	0.0853	12.6	0.505	0.847
Staff interviewed who received in-service training in past 3 years for STI DX lab	Facilities offering STI DX lab	Non-government	0.199	115	0.0413	20.7	0.116	0.282
Staff interviewed who received in-service training in past 3 years for STI DX lab	Facilities offering STI DX lab	Government	0.186	47	0.0629	33.8	0.060	0.312
Staff interviewed who received in-service training in past 3 years for STI services	Facilities offering STI service	Non-government	0.725	115	0.0461	6.4	0.633	0.817
Staff interviewed who received in-service training in past 3 years for STI services	Facilities offering STI service	Government	0.682	47	0.0753	11.0	0.531	0.833
Staff interviewed who received in-service training in past 3 years for TB DX lab	Facilities offering TB DX lab	Non-government	0.220	37	0.0755	34.3	0.069	0.371
Staff interviewed who received in-service training in past 3 years for TB DX lab	Facilities offering TB DX lab	Government	0.277	15	0.1280	46.2	0.021	0.533

Appendix B

Data Quality

Data were available for all 238 facilities surveyed; however, not all sections of the questionnaire were captured for all facilities. For the stockout assessment section (Q427), data were missing for 9.2 % of facilities. For the sharps management and infection control section, data were missing for 3.7% of facilities. The commodities management section data were missing for 7.9% of facilities, storage conditions for 0.8% of facilities, and Part I, facility infrastructure and services data were missing for 5% of facilities. In some cases, data may not have been available if the questions in a section did not apply to the facility.

Appendix C

Survey Personnel

Albert Mugume Kato	Independent Consultant
Alexeev Mutamba	Independent Consultant
Alice Lamwaka	Ministry of Health
Allie Kibwika-Muyinda	Mulango Hospital, Assistant Director
Allison Cochran	DELIVER, Program Associate
Annette Kuteesa	Independent Consultant
Bernard Baitwababo	Ministry of Health, Research Assistant
Caroline Kyarimpa	Independent Consultant
Dana Aronovich	DELIVER, Research & Evaluation Advisor
Denis Akankunda	Independent Consultant
Eddie Mukoyo	Ministry of Health, HMIS
Erika Ronnow	DELIVER, Research & Evaluation Advisor
George Kibumba	Makerere University Department of Pharmacy
Geraldine Matsiko	Institute of Public Health, Research Assistant
Godfrey Makanga	Independent Consultant
Godfrey Ojiamb	Independent Consultant
Hilda Nsubuga	Uganda Bureau of Standards
Janet Mamatovu	Independent Consultant
Joanita Kafuko	Independent Consultant
Joseph Mwoga	Independent Consultant
Martin Oteba	Ministry of Health, Head of Pharmacy
Moses Muwonge	Ministry of Health, HMIS
Nelson Beguma Begumisa	Makerere University, Research Assistant
Robert Kawagga	Independent Consultant
Robert Kira	Independent Consultant
Robert Otto	Makerere University Department of Pharmacy
Rosemary Namirembe	Independent Consultant
Sam Balyejjusa	Makerere University Department of Pharmacy
Sandra Zawedde	Ministry Of Health, Research Assistant
Sarah Nakendo	Independent Consultant
Steve Wilbur	DELIVER, Uganda Resident Logistics Advisor

Appendix D

Commodities Surveyed

HIV test kits:
1) Capillus
2) Bionor
3) Determine
4) Serocard
5) Hema-strip
6) Multispot/Ginne
7) Unigold

Contraceptives:
8) Microgynon oral pill
9) Male condom
10) Depo-Provera

Opportunistic infection drugs:
11) Fluconazole (Diflucan)
12) Co-trimoxazole (Septrin)
13) Acyclovir (Zovirax/Cyclovax)

Malarial drugs:
14) Chloroquine
15) Sulphadoxine pyrethamine (Fansidar)

STI drugs:
16) Ciprofloxacin (Cipro)
17) Benzathine penicillin
18) Doxycycline
19) Metronidazole (Flagyl)

ARVs:
20) Nevirapine
21) ddI/videx
22) d4t/stavudine
23) AZT/zidovudine

TB medications:
24) Blister pack, 1st treatment
25) Ethambutol
26) Isoniazide
27) Rifampin

Other commodities:
28) Disinfectant (JIK)
29) Unused sharps boxes
30) Plastic trash liners for wet waste
31) Clean gloves
32) Disposable pipettes/Disposable tips for pipettes

Appendix E

Facilities Surveyed and Facility Type

Iganga District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
KIYUNGA	HC IV
BUKANGA	HC III
KIKALU	HC III
LUBIRA	HC III
MAGADA/IRIMBI	HC III
NAWANDALA	HC III
BUSANDA	HC II
BUSIIRO	HC II
BUYOBOYA	HC II
KAWETE	HC II
LWAKI	HC II
NAKYERE	HC II
NAMIGANDA	HC II
NANTAMALI	HC II
WALUGOGO	HC II
Non-Government Facilities	
BUGOBI	HC III
BUKONTE	HC III
KIGALAMA	HC III
KIRINGA	HC III
NAWANSEGA	HC III

Kasese District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
BWERA	DH
BUHAWULA	HC III
IBUGA PRISON	HC III
KARAMBI	HC III
KINYAMASEKE	HC III
KITHOLU	HC III
KYARUMBA	HC III
LAKE KATWE	HC III
MUHOKYA	HC III
MUSYENENE	HC III
NYABIRONGO	HC III
RUKOOKI	HC III
KABATUNDA	HC II
KATUNGURU	HC II
KAYANJA	HC II
MWEYA	HC II
KYANYATSI	HC II
Non-Government Facilities	
KILEMBE HOSPITAL	HC IV
ST.PAUL	HC IV
KANAMBA	HC II
NYABUGANDO	HC III

Lira District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
ALEBTONG	HC IV
DOKOLO	HC IV
ABAKO	HC III
AMUGO	HC III
APALA	HC III
BAR	HC III
BATA	HC III
KWERA	HC III
NAMASALE	HC III
OKWANG	HC III
ABIA	HC II
ADOK	HC II
ADWIR	HC II
AGALI	HC II
AWANGIRO	HC II
BARJOBI	HC II
OKWONGO	HC II
Non-Government Facilities	
AMI HOSPITAL	HC IV
ALANYI	HC III
ALIWANG	HC III

Luwero District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
NAKASEKE HOSPITAL	DH
KALAGALA	HC IV
NYIMBWA	HC IV
BOWA	HC III
BUTUNTUMULA	HC III
KAPEEKA	HC III
KIKOMA	HC III
KIKUBE	HC III
NSAWO	HC III
WABUSANA	HC III
WAKYATO	HC III
KAGOMBE	HC II
Non-Government Facilities	
KIWOKO HOSPITAL	
AWEBWA	HC III
BISHOP CEASER	HC III
LUTEETE	HC III
MULAJJE	HC III
NANDERE	HC III
KATIKAMU	HC II
LUSANJA	HC II

Mukono District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
KAWOLO HOSPITAL	DH
NTENJERU-KOJJA	HC IV
MUKONO	HC IV
BUSABAGA	HC III
BUWAGAJJO	HC III
GOMA	HC III
KYAMPISI	HC III
NAGOJJE	HC III
NAKIFUMA	HC III
NAMUGANGA	HC III
SSI	HC III
BUGUNGU	HC II
MPUNGE	HC II
SEETA KASAWO	HC II
Non-Government Facilities	
LUGAZI HOSPITAL	Private Hosp.
NYENGA HOSPITAL	HC IV
KASAKU	HC II
KAVULE	HC II
LUGAZI	HC II

Nebbi District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
NEBBI HOSPITAL	DH
PAKWACH	HC IV
AKWORO	HC III
PAIDHA	HC III
PAROMBO	HC III
WADELAI	HC III
KALOWANG	HC II
KANGO	HC II
OTHEKO	HC II
OWEKO	HC II
PAMAKA	HC II
PANYIGORO	HC II
POKWERO	HC II
RAGEM	HC II
Non-Government Facilities	
NYAPEA (ZUMBO)	HC III
PAKIA	HC III
PAKWACH MISSION	HC III
PADEA	HC II
PAILA	HC II
ZUMBO	HC II

Ntungamo District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
KITWE	HC IV
RUBAARE	HC IV
RWASHAMAIRE	HC IV
KAYONZA	HC III
KITONDO	HC III
NTUNGAMO	HC III
NYABUSHENYI	HC III
RUHAAMA	HC III
RWEKINIRO	HC III
BWONGYERA	HC II
KIGAAGA	HC II
KYAMWASHA	HC II
NGOMA	HC II
NYAKYERA	HC II
RUGARAMA	HC II
RUKONI	HC II
RWANDA	HC II
RWOHO	HC II
Non-Government Facilities	
KAGAMBA	HC III

Pader District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
PAJULE	HC IV
ACHOLI BUR	HC III
ACHOLPII	HC III
ADILANGA	HC III
ATANGA	HC III
AWERE	HC III
LIRA PALWO	HC III
PADER	HC III
PAIMOL	HC III
PATONGO	HC III
AGAGO REF CAMP	HC II
LIRA KATO	HC II
OMIYA PACWA	HC II
PURANGA	HC II
WOL	HC II
Non-Government Facilities	
KALONGO	DH
PURANGA	HC III

Pallisa District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
PALLISA HOSPITAL	DH
KAKORO	HC IV
KAMUGE	HC IV
APOPONG	HC III
BULANGIRA	HC III
GOGONYO	HC III
IKI-IKI	HC III
KABWANGASI	HC III
KADAMA	HC III
KADERUNA	HC III
KASODO	HC III
KATIRA	HC III
KEREKERENE	HC II
KIBALE	HC III
NABOA	HC III
Non-Government Facilities	
KABWANGASI	HC III
KAKORO SDA	HC III
KAPUWAI	HC III
NAGWERE	HC III
GAALI MAGI N.H	HC III

Rukungiri District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
BUHUNGA	HC III
BWAMBARA	HC III
KISIIZI	HC III
NYAKISHENYI	HC III
RUHINDA	HC III
RUKUNGIRI	HC III
SOROTI EASTERN DIVISION	HC III
KARUHEMBE	HC II
KASHESHE	HC II
MASYA	HC II
RUKUNGIRI TOWN	HC II
RWENSHAMA	HC II
Non-Government Facilities	
KISIIZI HOSPITAL	HC IV
NYAKIBALE HOSPITAL	HC IV
RUGARAMA	HC III
RUSHESHE	HC III
RWENGIRI	HC III
RWERERE	HC III

Soroti District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
APAPAI	HC IV
SERERE	HC IV
SOROTI HOSPITAL	DH
TIRIRI	HC IV
ATIIRA	HC III
DAKABELA	HC III
GWERI	HC III
KADUNGULU	HC III
KAMOD	HC III
KAMUDA	HC III
KATETA	HC III
KYERE	HC III
SOROTI MUN.	HC III
OMAGORO	HC II
Non-Government Facilities	
KIDETOK	HC III
MADERA	HC III
MIRIA CLINIC	HC III
SOROTI (UMSC)	HC III

Tororo District

Name	Facility Type
Government Facilities	
DISTRICT WAREHOUSE	WH
TORORO HOSPITAL	DH
BUSOLWE HOSPITAL	HC IV
KIYEYI	HC IV
KWAPA	HC IV
MULANDA	HC IV
NAGONGERA	HC IV
BUSABA CCF	HC III
KANGALABA	HC III
KISOKO	HC III
MERIKIT	HC III
MUKUJU	HC III
NABIGANDA	HC III
PAYA	HC III
TORORO	HC III
BUGALO	HC II
LWALA	HC II
MORUKATIPE	HC II
POYAMERI CCF	HC II
Non-Government Facilities	
ST ANTHONY'S HOSPITAL	HC IV
RUBONGI	HC III

Appendix F

Survey Instrument

SURVEY MANUAL

ASSESSMENT OF SERVICES AND COMMODITY AVAILABILITY RELATED TO HIV/AIDS IN UGANDA

John Snow, Inc. and JSI Research and Training Institute
DELIVER and AIM Projects

In collaboration with ORC Macro, Inc.
with funding from USAID and CDC

Table of Contents

I. INTRODUCTION

A. INTRODUCTION OF THE SURVEY

The primary objectives of the survey are to assess the logistics systems, the availability and current stock of a selected list of health commodities, and the availability of services for HIV/AIDS prevention, care and support.
As part of their on-going monitoring and evaluation of the Ministry of Health and USAID-supported programs, the MOH and its USAID partners are conducting a nationally valid baseline survey for government and NGO facilities in logistics and HIV/AIDS supported activities. The general objectives of the survey are as follows:

- Provide the MOH with current information on logistics and stock status of key health commodities, prior to the introduction of the new "pull" request and distribution system for the health commodities.
- Provide the MOH with current information on the availability of HIV/AIDS prevention, care and support services, including other STIs and TB and other OIs, at a nationally representative sample of MOH and NGO facilities, prior to the expansion of these services throughout the country.
- Provide the MOH and its USAID partners with information on the training of staff who manage and/or provide these services.
- Provide USAID with a baseline to measure the improvements in the logistics system for health commodities from its support to the Ministry of Health through DELIVER and other USAID projects.
- Provide USAID with a baseline to measure the improvements in HIV/AIDS support services from USAID's support to the AIM Project.

B. INTRODUCTION TO THE TRAINING

The purpose of this 4-day training is to prepare you for two weeks of information gathering in the field on these topics. We will be using a survey tool developed jointly by the DELIVER project, the AIM project, and Macro, International. It is designed to collect quantitative and qualitative data on logistics management and HIV/AIDS services from public and NGO facilities throughout the country.

By the end of the training, participants should:

- Understand the purpose and objectives of the assessment.
- Understand some basic concepts of HIV/AIDS support services and logistics management.
- Understand the instrument and how to collect data on HIV/AIDS prevention, care and support services, and logistics management of certain health commodities.
- Gain interviewing skills related specifically to the instrument used in the survey.
- Understand the team's responsibilities in conducting the survey.

A total of 12 teams will conduct the survey. One person is assigned as the contact person/team leader for the team. During the survey training course, you will be instructed how to identify the appropriate respondents at each facility and how to fill in questionnaires correctly. You will also conduct a field test of the instrument with other trainees in a nearby health facility.

C. WHAT INFORMATION DOES THE INSTRUMENT COLLECT?

Because this survey is designed to collect data regarding both services and logistics at the health facility level, the instrument was jointly designed by staff from the DELIVER project of JSI, the AIM project of JSI Research and Training, and Macro, International, with reviews by USAID, CDC and the MOH. Part I of the instrument will collect data on HIV/AIDS services and part II of the instrument will collect data on health commodity logistics system performance and commodity availability at health facilities.

This survey will be carried out again in several years to measure changes in services and commodity availability and the impact of the technical assistance provided by DELIVER and AIM. Portions of this survey can be used for ongoing supervision, performance monitoring and to monitor commodity availability.

II. THE INSTRUMENT

A. THE SAMPLING FRAME

The hospitals, clinics, and other health facilities included in this survey have been specifically selected to meet special sample criteria. Every attempt should be made to conduct the data collection at the selected facilities.

If are not sure about whether a facility that you have found is actually in the sample, contact the Survey Manager.

If a facility included in the team's assignment has closed or if you cannot locate a facility, go to the closest facility, note that you have selected a different facility and inform the Survey Manager.

B. GAINING PERMISSION FOR THE SURVEY

The study team will be visiting facilities that are operated by the government and those that are operated privately. The private facilities must give permission for the survey to be conducted on their premises. Private facilities may be less willing to participate if they fear the survey will result in negative findings or that conducting the survey will interfere with service provision.

Prior notification of the survey, either from the main office of the operating authority, or if it is an independent facility, from one of the government sponsors of the survey, will help pave the way for agreement to participate. The private facility may be especially concerned about the confidentiality of the survey results. You may provide reassurance that results will only be provided in an aggregate manner (grouping facilities) so that no one facility can be identified with any particular findings.

The initial impression you give to the facility staff will be important to gaining their willing cooperation with the survey. At all times the staff at the facility must be treated with respect and politeness. Upon arrival at each facility, the contact/point person will ask to see the person in charge. If the official "in-charge" is not present the day of the survey, they must ask to see the person acting "in-charge" for the day. The contact/point person will introduce the survey team and explain the purpose of the visit and the activities that are a part of the survey. At this time, the introductory letters from the relevant organization and the letters explaining the survey and giving the team authorization to visit facilities will be given to the in-charge.

SOME INFORMATION FOR AN INTRODUCTION UPON ARRIVAL AT A FACILITY IS ON THE FRONT PAGE OF THE INSTRUMENT.

If you are refused an interview in the facility and nothing you say can make the in-charge reconsider, contact the Survey Manager, and provide the name of the facility, it's operating authority, and location. The Survey Manager will make every attempt to contact appropriate persons who can help to convince the health facility staff to allow the interview.

C. ORGANIZING DATA COLLECTION AT A FACILITY

At the start of the facility visit, the Team Leader will discuss with the person in-charge or other knowledgeable person the organization of the service delivery system for the HIV/AIDS, STI, and tuberculosis services as well as for laboratory and pharmacy activities. It is important to determine at the start of your visit who you will need to interview, where the relevant services are being provided, where the laboratory is located and where medications and supplies are stored. It is also important to determine the times and locations where consultations for the various priority services are held in order to plan the logistics for the data collection. For a small facility, this may be relatively easy since most services are in the same general area. For larger facilities, this may involve different departments.

The contact person/team leader must:

1) Monitor the activities of the team during the course of each day's activities. In particular, the contact/point person must ensure that the team yields the appropriate number of completed instruments by the end of the day's activities.
2) Check all questionnaires received at the end of the day to ensure that all items are completed and skip patterns are followed.
3) Feedback information to the team members on any problems observed in the completed questionnaires, and discuss with the team any problems they have encountered.
4) Maintain regular contact with the Survey Manager. Feedback information on any problems with staff performance or aspects of the survey. Promptly notify the Survey Manager of any changes in the visit schedule initially prepared.
5) Prepare a packet of questionnaires at the end of the visit to each facility for return to the Kampala. Make sure that the correct totals of health provider, storage condition tables and questionnaires are shown on the cover of the facility inventory.
   a. Who to interview; facility substitution (if any)
   b. Where to find personnel to interview;
   c. Traveling within the district

D. ORGANIZING YOUR WORK

Experience has shown that a reasonable approach for organizing the data collection in facilities is as follows:

1) Team members meet with the person in-charge to explain survey components and gain permission for access to facility.
2) Discuss client flow, staff work patterns, and data collection needs to identify the best approach for completing the work. Reassure the in-charge that, other than a few of the specific management questions, s/he can delegate others at the facility to help the team. *Often the person in-charge feels obligated to try to respond to all questions and to show the team around the facility. This is not necessary and may create resentment in the in-charge who has many responsibilities.*
3) Ask to be introduced to all service areas where observations will occur.

The most efficient plan will result if the team leader develops a collaborative planning strategy with the person in-charge or another person designated by the in-charge, who is familiar with the day-to-day functioning of the facility, and together they develop the strategy.

The important people and areas in the facility for data collection are:
1) HIV/AIDS services: You must talk with the person most knowledgeable about HIV/AIDS services of any type if they are provided at that facility. This means diagnosis, treatment, social services, and working with people affected by HIV/AIDS.
2) Services for Sexually Transmitted Infections (STI): General outpatient (OPD) providers will most often provide these services. Some facilities, however, may have separate clinics. If several services provide STI diagnosis and treatment (e.g., family planning and antenatal care as well as OPD) you want to go to the area where STI treatment is the client's primary reason for visiting the facility, (usually the OPD).
3) Tuberculosis services: This may be both the OPD and a separate service where tuberculosis clients are followed. In this case you need to talk with the providers responsible for each aspect of service delivery.
4) Laboratory: You will visit the laboratory and will need to talk with laboratory technicians.
5) Pharmacy/store room: You will visit the pharmacy or store room where health commodities are stored and managed and will need to talk with the persons responsible for ordering and maintaining the commodities.

E. IDENTIFYING STAFF FOR INTERVIEW

In the first portion of the survey, we are interested in interviewing staff that personally provide <u>any</u> client services related to HIV/AIDS, STIs, and/or tuberculosis. The provider may provide diagnosis and treatment, counseling, social support, or any other service where there is direct responsibility for the client. We are also collecting information on in-service education they have received related to these services. This will help us identify the needs for future educational programs. In the second portion of the

survey you will also need to interview staff who are responsible for laboratory diagnostics and staff responsible for dispensing, managing and ordering drugs and health commodities.

At the beginning of your visit you must plan which staff will be interviewed so that the person in-charge can ensure they remain available, or can call them from home, if they have already left the facility. At a minimum, you should try to interview staff ensuring that providers for all four of the service areas listed below are included.

1) HIV/AIDS counseling or social support, including Voluntary Counseling and Testing (VCT) and Prevention of Mother to Child Transmission (PMTCT)
2) HIV/AIDS treatment and management of opportunistic infections
3) STI diagnosis and treatment
4) Tuberculosis diagnosis and treatment
5) Therapeutic injections
6) Laboratory diagnostics
7) Health commodity storage and management

Some staff will provide multiple services. If staff provide services across several areas, ensure that among those selected, you get representation for as many of the services described in questions 101-111, as feasible.

Ask the in charge person to assist you in ensuring that the staff are interviewed before they leave the facility.

III COMPLETING THE FACILITY QUESTIONNAIRES

The information that you collect in the field will eventually be entered into a data file using computers in Kampala. At that point, it is very difficult to correct for errors or omissions in the questionnaires. Consequently, it is very important that you correctly record the answers the respondent gives and follow all special instructions in the questionnaire.

A. RECORDING THE RESPONSES

All questionnaires are to be completed using pens with blue ink. Blue ink is used because it can be distinguished from the black ink in which the questionnaires are printed. Never use red or green ink in recording responses since these colors are reserved for correcting the questionnaires in the office and field, respectively.

The procedures for recording responses will vary according to the type of question; there are three types of questions (1) pre-coded/multiple choice questions and (2) questions requiring a numeric response.

Never leave a response blank! A blank is recorded as "missing information" because it is not known if you asked the question or not. If a response is negative, the negative response must be circled. Incomplete response can disqualify entire sections or the whole of the questionnaire from the sample.

1. PRE-CODED QUESTIONS

The response choices for pre-coded questions are listed in the questionnaire. To record a respondent's answer, circle the number (code) that corresponds to the reply. Make sure that each circle surrounds only a single number.

Example where only one response is correct

108	Does this facility ever have electricity? (from any source, but NOT INCLUDING backup generator.)	YES, OUTSIDE POWER ..... 1 YES, SOLAR ..... 2 NO 8	 ➔112 ➔112

Sometimes there can be more than one response. In this case, the codes will be letters (e.g., A) rather than numbers. Where appropriate, you will be asked to circle all answers that apply and multiple answers may be circled. Be sure to circle all the appropriate responses.

Example where more than one response may be correct

307	What is the final process most commonly used for disinfecting or sterilizing medical equipment (e.g., surgical instruments, speculums) prior to reuse? IF DIFFERENT METHODS ARE USED FOR DIFFERENT TYPES OF EQUIPMENT, INDICATE THE DIFFERENT METHODS.	DRY HEAT STERILIZATION ..... A AUTOCLAVE ..... B STEAM ..... C BOILING ..... D CHEMICAL ..... E OTHER_____ . W NONE ..... Y

In some cases, a pre-coded question will include an "other" category. The "other" code should be circled when the answer is different from any of the pre-coded responses listed for the question. When you circle the code "other" for a particular question, write the answer in the space provided. If you need more room, use the margins or the comments/notes section at the end of the questionnaire and write, "see note in comments section." If you use the "notes" section to further explain a response, be sure to properly document the question number (and letter where appropriate) at the beginning of the comment.

Example of response using OTHER:

304	After giving an injection, how is the needle and syringe disposed of?	DROPPED DIRECTLY INTO SHARPS BOX ..... A PUT INTO NON-SHARPS CONTAINER PRIOR TO DISPOSAL ..... B OTHER ____throw in trash C	

Sometimes responses to particular questions must be entered in response grid (table). When recording a response in one of these grids, be sure that you are entering the answer in the proper row and column.

Examples of response grid

222	ITEMS REQUIRED TO PROVIDE INJECTION SERVICES	OBSERVED IN ROOM OR ADJACENT	REPORTED AVAILABLE	NOT AVAILABLE
	A) Sharps box for needles	(1)	2	3
	B) 5 or more disposable (unused)/sterilizable: 1 ml syringes, AND 5 or more 3 ml syringes with 22 gauge needles?	1	(2)	3
	C) Hand-washing items (soap, towel)?	1	2	(3)

2. NUMERIC QUESTIONS

For many questions a numeric response is appropriate and should be entered in the available boxes.

Example of response needing numeric response

	USING PRIOR MONTH REPORT OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE DURING THE PRIOR FULL MONTH.	☐☐☐ DON'T KNOW ..... 998 NONE 000

If the number consists of fewer digits then the boxes provided the interviewer should enter "0" in the boxes preceding the number. For example, in the example above, if the number is "5", enter "005". Whenever respondents do not know the answer to a numeric question, enter '98', for a response having two boxes. For responses with more than two boxes, record nines with the last digit being an '8'. For a response with only one number response box, record an '8'. If there is a precoded response (e.g. DON'T KNOW …….998) you should simply circle the "998" precoded response.

3. CORRECTING MISTAKES

If you make a mistake entering an answer or the respondent changes their reply, put two horizontal lines through the incorrect response. Do not try to erase or write over an answer.

Example of corrected response

221	What type of injection equipment is used during routine immunization sessions at this facility?	SINGLE USE..... (1) STERILIZABLE ..... 2 OTHER__injection gun_____ ..... (6) (SPECIFY)	

Remember that if there are two responses for a particular question that requires only one response, it may be impossible later, when the data are being computerized, to determine which is the correct answer. If you write over an answer, the data input staff frequently cannot determine which of the two responses you meant as the correct response.

4. FOLLOWING INSTRUCTIONS

The questionnaires include a series of instructions for the interviewers. It is important that you follow the instructions included in the questionnaire consistently.

A. Skip instructions

The questionnaire is set up to avoid as much redundancy as possible and ask only appropriate questions given a situation. Arrows are used throughout the questionnaires to give directions about the next question to ask (i.e., 'to skip to'). It is very important to follow these skips, for they will make the questionnaire much shorter and thus increase the cooperation of the respondents. Skips enable the interviewer to collect the necessary information in as an efficient manner as possible.

Example of response indicating a "skip"

108	Does this facility ever have electricity? (from any source, but NOT INCLUDING backup generator.)	YES, OUTSIDE POWER ..... 1 YES, SOLAR..... 2 NO..... 8	→112

B. Written instructions

Throughout the questionnaires, there are written instructions to help you remember important directions for collecting and recording information. These instructions appear in BOLD-FACED CAPITAL LETTERS. Pay attention to the instructions since they are there to help you complete the questionnaire as accurately and completely as possible.

Example of written instructions

104	Does this facility have a back-up generator? IF YES, ASK IF IT IS FUNCTIONING AND IF FUEL IS PRESENT OR NOT ACCEPT THE WORD OF THE RESPONDENT.	FUNCTIONS, FUEL PRESENT..... 1 FUNCTIONS, NO FUEL TODAY ... 2 NOT FUNCTIONING..... 3 NO GENERATOR 4	

5. OBSERVING VERSUS REPORTING:

In the questionnaire, you will often be recording information on the presence of equipment, drugs, supplies and other items required for the delivery of the priority services. The following criteria are to be used for classifying the presence of the item:

"OBSERVED": The item has been seen in the service provision area or in an immediately adjacent room, where it can easily be used. If the service is not being provided the day of the visit, the item may be stored in a location further away. If staff report that the item is brought to the service delivery area at the time services are provided the correct response is "REPORTED AVAILABLE".

"REPORTED AVAILABLE": The staff report the item is located in the facility or immediately adjacent, where it can easily be used, but for some reason. (e.g., key to cabinet is missing or room is locked), the interviewer cannot observe the item.

"NOT AVAILABLE": The item is reported either to not be within reasonable proximity, or is not available. If the item is "NOT AVAILABLE" verify that the staff is not reporting "not available" when the item is present, but non-functioning. If the item is available but is not functioning, it will be marked as "OBSERVED" OR "REPORTED AVAILABLE" and then subsequently marked as "NOT FUNCTIONING". The program implication of having equipment that is not functioning is different than for when the equipment does not exist.

"8" for "NOT DETERMINED" or "DON'T KNOW": The respondent is not certain if the item is available or not and you cannot verify this (e.g. the place where the item might be is locked and cannot be accessed at the time of the survey and the respondent does not know about the item).

It is very important that you make every effort to see the items and when called for, that you verify that an item is in working order. It is possible that in a few instances it will not be feasible for you to see an item and, as noted above, allowance has been made for recording whether an informant indicates that the item is available. However, the goal is for you to 'observe' the items not simply to 'report on' their availability. If facility informants appear reluctant to show you items or become impatient with the number of items that you must check on, you may need both tact and persistence in making sure that you see the items.

IV ENSURING QUALITY

All members of the team are responsible for ensuring that the data collected at each facility is as accurate and comprehensive as possible.

Each data collector/interviewer is responsible for:

- Checking that questionnaires you have filled are complete, ensuring that all answers are clear and reasonable, and that your handwriting is legible.

- If questions are omitted or there appear to be errors, you must return to the original respondent(s) if possible. Apologize, explain that you made an error, and ask the question again. Check all questionnaires received at the end of the day to ensure that all items are completed and skip patterns are followed.

Each team leader is responsible for:

- Ensuring that all the team visits and completes surveys for all of the facilities assigned during the field visit. If you cannot locate a facility or if the facility is closed, contact the Survey Manager.
- Ensuring that the team arrives at the facility prior to opening time.
- Meeting with the person in-charge to coordinate and explain the survey components and gain permission for access to the facility.
- Maintaining regular contact with the Survey Manager. Follow the call-in schedule that will be provided before you leave for the district. Feedback information on any problems with staff performance or aspects of the survey. Promptly notify the Survey Manager of any changes in the visit schedule initially prepared.
- Ensuring that all team members meet at the end of each day's data collection to review the questionnaires and check for accuracy and completeness.
- Preparing a packet of questionnaires at the end of the visit to each facility for return to Kampala with the team. The team leader should deliver the completed questionnaires to the survey manager at the Kampala Sheraton upon arrival to Kampala and before returning home. All surveys must be received by noon, June 22nd.

VII. INTERVIEWING AND FACILITATION SKILLS

The following are some general rules in conducting interviews or observations at a facility. Specific procedures for completing each of the survey are described in detail in each section.

- *Encourage respondents to cooperate by your approach*

The quality of the information you collect will depend to a large extent on the attitude of both the health providers and clients. Therefore, the interaction between you and all respondents is very important. All respondents should be treated respectfully and politely. The respondents should know that you appreciate their cooperation and the time they are taking to help make the survey successful.

If the respondent feels that the information is important and that you are sympathetic to their situation, they will be more straightforward with responses and will be more likely to answer questions to the best of their ability. If they feel pressured to respond, or feel that the interview is a burden, they may not carefully think about responses.

- *Make sure you ask the questions as they are written in the questionnaire*

Speak slowly and clearly so that the people/person you are interviewing will have no difficulty in hearing or understanding the question. At times, you may need to repeat the question in order to be sure the respondent(s) understand(s) it. In those cases, do not paraphrase the question but repeat it as it is written. If, after you have repeated a question, the respondent(s) still do(es) not understand it, you may have to restate the question. Be very careful when you change the wording, however, that you do not alter the meaning of the original question. As much as possible, wording that conveys the question so that respondents will understand, should be discussed during training, and if appropriate, changes made in the questionnaire at that time.

- *Be straightforward*

There are many questions in the survey where you are asking about the availability of items, and then asking to see them. Providers will be more cooperative if they know beforehand what to expect. If you ask questions and then later ask to see items, people may think you are trying to trick them, or "checking up" on their answer.

In order to have the greatest amount of cooperation, always tell the respondent what is coming. For example:

"Now I am going to ask you if you have various types of equipment or supplies, if they are in working order, and after answering about all of them, I will need to see the items so that I can completely fill in this questionnaire."

- *Never suggest answers to the respondents*

If the respondents' answer is not relevant to a question, do not prompt them by saying something like "I suppose you mean that…Is that right?" In many cases, the informants will agree with your interpretation of their answer, even when that is not what they meant. Rather, in most cases, you should probe in such a manner that the informants themselves come up with the relevant answer, e.g.,

"Can you explain a little more?"
"There is no hurry. Take a moment to think about it".

Specific questions for which it may be necessary to provide additional clarification will be discussed in the detailed instructions for completing the survey questionnaires. Even in these cases, you should provide only the minimum information required for an appropriate response. Except when specifically instructed (e.g. when asking the client about their thoughts on the facility during the client interview), never read out the list of coded answers to the respondents, even if they have trouble in answering the question.

■ *Ask all applicable questions*

In most cases, you will ask questions in the sequence in which they appear in the questionnaire. However, because the organization of facilities often differ, you may find that to complete one module you have to talk to more than one respondent, or go to different areas of the facility. It is up to you to ensure that when sections are skipped because the information must be collected from a different informant or location, that those sections are completed before your departure.

■ *Handle hesitant respondents tactfully*

There may be situations where the respondents simply say, "We don't know", give an irrelevant answer, act very bored or detached, contradict something they have already said, or refuse to answer the question. In these cases you must try to re-interest them in the conversation. For example, if you sense that they are growing restless, reassure them that there are not many more questions and that the government is very interested in what they say about the services or about their facility.

If the informants are giving irrelevant or elaborate answers (or complaining about something), do not stop them abruptly or rudely, but listen to what they have to say. Then try to steer them gently back to the original question. You can also write down what they say and tell them that it is duly noted. A good atmosphere must be maintained throughout the interview. The best atmosphere for an interview is one in which the respondents see the interviewer as a friendly, sympathetic, and responsive person who cares about them.

■ *Make every effort possible not to let the survey interfere with the health workers' ability to see patients*

If the health worker you need to see is busy with a client, wait until that visit is completed before approaching the health worker. Wait until there is a qualified person to show you around for completing the inventory and staff interview modules.

■ *Offer no opinions or advice on specific facility practices*

If you are asked a question that you think requires your opinion or advice, simply respond that you are here to collect information to provide an overview of the (whatever health service is involved) services, and you are interested in the systems and practices at this facility. Explaining this and then simply stating "I'm not in a position to provide any advice or opinions" may be sufficient.

If you observe what you consider to be wrong practices, make a note on the questionnaire, but, again, make no comment or intervention. Remember that the purpose of the survey is to collect information that will help to improve the health services overall. If you intervene with one health worker or with one client this may bias further results and prevent you from observing the true practices and facility characteristics which might need to be addressed for the health system as a whole.

■ *Never raise expectations of immediate changes in the situation of the staff or facility*

Do not raise expectations that that you can immediately assist with solving problems that the staff or clients raise as problems. You are going to provide information to decision-makers and health planners and administrators, but any changes as a result of the survey will most likely occur over an extended period of time, and be gradual in implementation. If clients or staff complain about the poor state of repair of the facility, equipment, or supplies or other problems, provide a neutral or non-judgmental response (e.g., "I know these things are difficult").

VI QUESTIONNAIRES

A. Overview of the Facility Services Questionnaire

The facility inventory is designed to collect information on the availability of key HIV/AIDS services and basic equipment, supplies, and medications, and on the functioning of certain key systems (e.g., record-keeping, supervision, etc.). The facility services questionnaire includes:

1) Cover page/facility identification
2) Consent
3) List of HIV/AIDS services
4) List of staff to interview and locations to visit
5) Specific HIV/AIDS related services offered
6) Specific HIV/AIDS service components
7) Sharps management and infection control
8) Laboratory diagnostics
9) Pharmacy and health commodity management
10) Availability of essential medicines and supplies (tables)

Begin the interview with the person in-charge of the facility or the most senior health staff person responsible for outpatient services who is available at the time of your visit. Prior to beginning data collection, discuss with this person the types of information that you are seeking. Explain that you will first be asking general questions about the facility. Then, you will want to go to where specific services are offered and actually look at equipment, supplies, and drugs and health commodities.

The specific *services* you are interested in are any services related to HIV/AIDS, and STI and tuberculosis treatment services. You will also want to see the facility's laboratory (if applicable) and the place(s) drugs and other health supplies are stored. It is important when planning the strategy for collecting the inventory information from various services that the person in-charge ensures that the relevant persons (e.g. pharmacist, storekeeper, laboratory staff) will be present. At this time you must ask the person in-charge to assist you in planning your schedule so that you do not miss interviewing essential staff (who may leave early; who may have a special meeting on the day of the survey, etc.).

C. Detailed Instructions for Completing the Inventory

PART I: FACILITY IDENTIFICATION AND INFORMATION

COVER PAGE

Name of facility: Copy from sample list

Facility location: Write the most complete address possible for the facility. If there is not an address, describe the location (e.g., "between the villages of ___ and ___ or "next to the elementary school in ____ village". This is to help us relocate the facility if there is a need.

District: Refer to sample list with pre-assigned code number

Sub-district: Refer to sample list with pre-assigned code number

Facility code: Refer to sample list with pre-assigned code number

Type of facility: Verify the facility type that was provided to you on the sample list with the person in-charge. If there is a discrepancy, enter the code that you believe is appropriate based on the discussion with the person in-charge and note the reasons for making the change in the "Notes" section at the end of the inventory questionnaire.

Operating authority: This is the type of organization that manages the facility and provides the primary supervision. If the government hires the staff, but the managers of the facility are non-governmental, such as a religious organization or another non-governmental organization (NGO), the operating authority

is the NGO or religious organization. Verify the operating authority that was provided to you on the sample list with the person in-charge. If the operating authority indicated on the sample list is different than what the person in-charge states, write a note and enter the appropriate code.

Facility characteristics: Indicate the characteristics of the facility, including whether it is urban or rural (Urban includes facilities within the district center, rural includes facilities outside the district center), public or non-governmental and whether it is a warehouse (i.e. storing and managing commodities only) or a service delivery point (SDP).

Date : Fill in the date of the facility visit.

Name of team leader and team code: Record the name of the team leader and enter identity number assigned to the team.

Time interview started: Take note of the time you begin the interview. Use the 24-hour clock. In other words, 15:30 on the 24-hour clock is equal to 3:30 in the afternoon on the 12-hour clock.

PART 1, SECTION 1, 001, 002, 101-111 A-B:
ASSESSMENT OF HIV/AIDS SERVICES OFFERED

01 Permission for data collection: If you have received permission to continue with the survey, continue with the text and instructions that follow in Section 1 and 2.

02 Catchment area: The catchment area is an official assignment of population the facility is responsible for. This is the basis for determining potential service needs and coverage for a service. If the staff are certain that the clinic does not have a specific area for which it has (or has assumed) responsibility for serving (e.g. many private clinics have not defined catchment areas for the population they serve) the answer is "0" "NO DEFINED POPULATION".

03 Assessment of services offered from incharge of outpatient services: For each specific HIV/AIDS related service, ask the incharge whether or not those services are offered at the facility and if so, if they are offered today. If no, record if they refer clients to another facility that provides the relevant services.

04 Listing of staff to interview and locations to visit: This list is intended to assist you as the data collectors to identify service providers, laboratory staff and logistics managers to interview and the location where their services are offered. Interview up to four providers offering these services, prioritizing interviews with providers of the following key services (where available): VCT, PMTCT, TB and STIs.

101-111 A Specific programs and services related to HIV/AIDS: For each of the indicated programs or services, probe to ensure that the program or service is offered or whether they refer patients to another location. Following are definitions that should be used when probing.

101 Voluntary Counseling and Testing (VCT): All three items listed are required for VCT to be considered present.

1) Laboratory test for HIV on request
2) Staff responsible for counseling for all clients on prevention of HIV/AIDS
3) Staff responsible for counseling positive clients.

102 Prevention of Mother to Child Transmission (PMTCT): PMTCT programs must include (at minimum) testing of pregnant women on request, and counseling about risks and benefits related to breast-feeding. Other components may include providing anti-retroviral medications (ARVs), milk formula, safer delivery practices, post delivery counseling and outreach.

103 "Youth Friendly" programs: These must be targeted activities that specifically address adolescent audiences and that are focused on encouraging youth participation, utilization of the services or could include outreach services funded by the facility. These services may relate to preventive

education for HIV, VCT, diagnosis and treatment of sexually transmitted infections (STIs), family planning, and safe motherhood services. These program activities may relate to encouraging adolescents to follow through on treatments.

104 Orphans and vulnerable children (OVC): Targeted programs that specifically address any of the following: social issues, economic support, psychosocial counseling for orphaned and vulnerable children and/or their caretakers. This could include outreach services funded by the facility as well.

105 Social support/post test services: The facility must have a specific program for HIV + clients. This should include at minimum a person who is responsible for counseling and for referring clients to programs that provide relevant services. Relevant services include testing for TB, support groups, socio-economic support activities (providing goods or funds).

106 Home based care: These are services offered by staff employed by the facility and funded by the facility. This may include training the HIV positive client or caretakers on issues related to caring for the debilitated AIDS patient and providing preventive or therapeutic interventions.

107 Management of opportunistic infections in HIV/AIDS patients: This includes prevention, diagnosis, treatment and palliative care. This may be in the general outpatient department or in a specific clinic, but it must include some specific acknowledgement that the infections are HIV/AIDS related. These services would be offered specifically for HIV positive clients, and might include preventive chemotherapy for tuberculosis (INH) or for Pneumonia, laboratory diagnosis, x-ray services, drug therapy and counseling for positive living. This should be a part of post-testing counseling and management. Staff may have received training, there may be specific guidelines for referral or management of clients with suspect infections. If the facility simply provides treatment for all sick people, and there is no differentiation of the HIV/AIDS related infections, the facility is not considered to offer treatment for opportunistic infections. This service can also be offered as an outreach service funded by the facility.

108 Sexually transmitted infections (STI): Any diagnosis and treatment for STIs either in a special clinic or the general outpatient clinic, or as part of outreach services. This may include routine syphilis testing, testing in response to client request, counseling about STIs, syndromic diagnosis (identifying a disease based on the symptoms presented by the client without laboratory confirmation) and prescription of medications for treatment.

109 Diagnosis for tuberculosis: This refers specifically to testing all persons with symptoms and signs suggestive of TB, whether HIV positive or negative. The facility itself must conduct the test. This may include routine sputum test, testing of clients only if symptoms are present, clinical diagnosis without laboratory confirmation, x-ray services and outreach activities funded by the facility.

110 Treatment for tuberculosis: This may include Direct Observation of Treatment (DOTS) program, a specific program where either the clients must come to the facility daily to take their medication, a health worker provides the medication directly during outreach services, or a trained family member/community volunteer directly observes the client taking their medication. Providers may also prescribe medications without requiring direct observation of the treatment component.

PART I, SECTION 1, 101-110 B - L: SPECIFIC HIV/AIDS RELATED SERVICE INFORMATION
These should be answered only for the services that are available at the facility.

B Unique service delivery site: We are looking for whether there are special programs related to the service. Some facilities will provide these different services in a special clinic, where staff are trained specifically for the service (UNIQUE). Other facilities will care for clients who need the services as a part of the general outpatient care (GENERAL). Some facilities have a special clinic on some days, but other days see the clients with general outpatient services. For "BOTH" to apply, it must be routine that the service is sometimes unique and sometimes general. If there are rare days (e.g., when the staff responsible is sick) that the service is provided with the general OPD services, but routinely the clients are only seen in the unique clinic, the correct response would be UNIQUE.

C Staff directly involved with patient care: We are looking for any staff who are responsible for diagnosing, providing counseling, or providing treatment (prescribing and dispensing) and follow up for clients receiving the indicated service. This does not include the laboratory staff who conduct the tests required. The same staff member may be included under several of the services if they provide multiple services.

D In-service education: We are asking this question to the person who is most familiar with the service, because some staff will not be present, particularly if the facility visit takes place in the afternoon. However, we will also interview the individual staff to verify the information when possible. In-service training includes any organized training, following initial schooling or training, provided to staff for staff development (e.g workshops, training seminars, etc.).

E Routine program components: We are trying to identify the components of the service that are provided by this facility.

F Number of days a month this service is provided by outreach: We are looking for the number of days that the facility actually provided outreach services in March of 2002. Outreach is a routine planned activity where the communities are informed that the service provider is coming and the activity is *funded through the facility*. Special campaigns or one-time activities are not counted as days of outreach per month.

G Partner organization: A partner organization is a non-affiliated organization that provides either goods, funds, training, or staff to the facility to assist in providing the service, or that has routine meetings with the facility to coordinate referral activities or follow-up of referred clients. There must be an active relationship between the facility and the partner organization. If the facility only refers to (or receives referrals from) an organization, without regular interaction, this is not considered a partner organization. If an organization provides only occasional training, this is not considered a partner organization. If you are visiting a government MOH facility, another MOH facility would not be considered a partnership. The above definition of partnership does apply to an MOH facility partnering with staff and facilities overseen by another ministry.

H Number of days a week this service offered: This refers to days that a client needing this service would receive it if they requested, and not be told to return another day.

I Guidelines or protocols: The guidelines and protocols are to ensure a systematic and consistent approach to providing the service so they must be written down. They may include specific components of the service that are to be provided, guidelines for referral (if relevant), and/or treatment protocols. A wall chart with the syndromic approach for STIs is accepted if it is in the service delivery area for STIs.

These must be in the service delivery area to be counted as present. If there is one guideline or protocol in a large facility, and it is with one service, it is unreasonable to assume that other services go more than a room away to seek the protocol for reference during client counseling. In these cases, the service where the protocol rests is counted as having it, and the others are not. In small facilities, it may be reasonable to assume that one protocol is easily accessible for all providers.

J Visual aids: These may be flip charts, posters, models, or any other visual means for reinforcing and explaining issues related to the service. A poster that explains something about prevention or treatment counts. A poster that simply advertises about the particular service or illness does not count.

These must be in the service delivery area to be counted as present. If there is one visual aid in a large facility, and it is with one service, it is unreasonable to assume that other services go more than a room away to seek the aid during client counseling. In these cases, the service where the visual aid rests is counted as having it, and the others are not. In small facilities, it may be reasonable to assume that one protocol is easily accessible for all providers.

K Service registers: Each facility keeps statistics on clients who are seen. Sometimes the information is in registration books (having symptom or complaint for which the client came to the facility) for each service, and sometimes in books completed after a consultation (having the diagnosis and treatment provided). You must ask to see what applies for each indicated service. In some cases the register may combine clients from a variety of services. This is acceptable as long as there is a column where it can be determined the main symptom or concern for which the client sought services.

L Service statistics: The various registers will indicate the types of clients you are interested in for each service. Review the services summary report for March 2002 for clients of interest (HIV + only) for each of the following services: VCT, PMTCT, STIs and TB.

For diagnosis of TB (question 109), count only new clients. For treatment of TB (question 110), count all individual clients seen for TB treatment during the month of March 2002.

For STIs in question 108L, count the number of clients seen in March 2002 with the following symptoms: urethral discharge, vaginal discharge, lower abdominal pain (no record of vaginal discharge), genital ulcers or other probably STI diagnoses. If any of these symptoms are not tracked separately on service registers, write “NA” or not applicable in the boxes provided for responses. The number of clients seen for these diagnoses should be summarized on a services tally sheet for the month of March 2002.

TYPES OF INFORMATION SOURCES BY SERVICE:

VCT: This information may be available in a consulting book, or may be available in a laboratory report. Ensure, however, if laboratory reports are used that the test was for VCT clients. All HIV/AIDS testing is not related to VCT. We want the total number of different clients who received VCT services during the prior month. This includes client who received counseling and/or testing.

PMTCT: There may be registered clients who routinely receive medications or supplies. In this case, you want the total number of different clients who received services during the prior month.

“Youth Friendly” This may be clients who attend training or education sessions, if that is the type of program offered. If there is not a specific register that identifies clients who attend special “youth friendly” sessions or receive services through these programs you cannot collect this information (response will be 998 “DON’T KNOW”. Adolescent clients who are seen along with other clients as part of the general service for all clients, cannot be counted as clients receiving services through “youth friendly” programs.

Orphans and Vulnerable Children (OVC) and Social support/post test services: Clients receiving these services must be registered and must receive regular services and follow up. We are looking for the number of different clients who received special services, social support, or home follow up. If there is a public health or social service department, the information may be there.

Home based care: This may be clients who actually received home care by facility staff, or may be clients who received training at the facility for home care. There should be a special register for these statistics to be available. We want the total number of different clients who received services.

Management of opportunistic infections: It must be possible to specifically identify these clients. The clients may be identified in the VCT register, if their receiving preventive medications is listed, or in the HIV/AIDS client registers.

Prevention services related to OI: Numbers of clients receiving treatment for opportunistic infections, again, must be clearly identified as HIV positive clients receiving the treatment. Some HIS systems have a reported illness of "HIV/AIDS related sickness". These statistics may count for clients receiving treatment for opportunistic infections.

STIs: Most STI clients will be listed in the general OPD client registers. We are looking for specific symptoms. During training, discuss the different terminology providers will use for describing clients with the indicated symptoms, and terminology that is accepted for "OTHER PROBABLE STI DIAGNOSES" (e.g., sometimes an actual illness: "trichomoniasis" or "probable gonorrhea" may be written. Since most HIS systems do not collect symptoms, to collect this information you must use register books. You must ensure that all relevant registers (some OPDs have 3 or 4 registers that are used at the same time for clients seen in different consulting rooms. You must add up all clients with the symptoms you are looking for, from all registers used in the OPD for the month for which data is being collected. The easiest way to collect the data is to ask a staff member to help you. The staff member will mark the tally sheet. You run your finger down the list of diagnoses and identify every client over 12 years of age with symptoms or diagnoses of interest. Tally and then fill the total for all persons who were older than 12 years of age who have listed any of the indicated symptoms or diagnoses.

112 Service providers: We are looking for staff responsible for direct client services. Staff who maintain records, register staff, who only take vital signs (temperature, blood pressure, weight) who are assistants to providers, but never have actual responsibility for diagnosis, treatment, or counseling, should not be counted. We are trying to identify the staff that are most eligible for in-service training related to the services we are interested in.

PART I, SECTION 2, 200-221: SHARPS MANAGEMENT AND INFECTION CONTROL

Therapeutic injections
We are looking for the normal injection environment for outpatient clients, and specifically not immunization injections if these are provided in a separate location. If there is not an injection room or a specific site where clients requiring injections receive them prior to departure, but rather each provider gives injections when necessary, or if they are not being offered on the day of the visit, then record as many of the observations for the facility as possible and mark "don't know" for those you are unable to answer. If there is a separate location for HIV clients and other clients, go to where HIV clients receive their injections.

200 Open for client services: This will help us when analyzing the information. Some supplies may have been put away if normal service delivery hours are finished. If the service is not open for clients at the time you are assessing the room, the respondent may indicate that supplies are normally available, but you may not see them. In that case, you should record "REPORTED AVAILABLE".

201

A) Sharps container: The secure container in which needles or sharp items can be safely disposed has different names and shapes. To qualify as a sharps container, it must be made of a substance that a needle does not readily penetrate (e.g. hard cardboard) with a sealed lid that has only a small opening to allow the sharp object to be placed inside. The container is used for placing sharp items, such as blades and needles. None of the following, which are often found in health facilities, qualify as a sharps container: an opened topped box, a plastic lined trash bin where the plastic bag is later removed, an open basin or bowl where used needles are placed for later disposal.

B) Needles and syringes: Even if clients are expected to purchase or bring their own needles and syringes, there should still be an emergency stock so that injections can safely be provided to clients in need.

C) Waste receptacle with lid and plastic liner: The receptacle is where gauze or other potentially contaminated waste is thrown. It must have a lid and a plastic liner that can be tied off and removed. This minimizes potential contact during disposal.

D) Hand washing items (soap)

E) Water: If the water is not piped into the room where services are delivered, there should be water in a container so that hands can be washed. If there is no water in the container and the explanation is that services are not being provided at the time of the survey but water is normally brought when services are being provided you may mark "2" for "REPORTED AVAILABLE". Ensure that piped water is actually present, or that water is actually in buckets or basins that are used. If services are being provided at the time of the survey, and there is no water, the correct response is "3" for "NOT AVAILABLE", even if the respondent indicates that water is normally available. It can reasonably be assumed that a health provider does not walk more than a room away between client consultations to wash hands, so if water is not available in the service delivery room or an immediately adjacent room, the correct response is "NOT AVAILABLE".

202 Water for use in examination areas: This refers to how the water is actually provided for use in examination/consultation areas in the facility on the day of the survey. If there is a water pipe or pump outside the facility and water is taken into the facility and used from another container, the answer is either "2" a container with a tap (the principle is that the water is flowing and used once) or "3" bucket or basin.

203 Immediately after injection: Describe what staff commonly do with needles and syringes immediately after giving the injection. If there is no standard, practice, but the practice depends on individuals or on availability of equipment, circle all that apply.

204 Disposal of needle/syringe: If there is no standard practice, but the practice depends on individuals or on availability of sharps containers, circle all that apply.

205-208 Sharps disposal: These questions ask about the use of sharps containers and their disposal. If staff empty sharps containers and reuse them for additional sharps and needles or other uses, indicate in question 205 that sharps containers are reused ("YES").

209-211 Disposal of hazardous materials: These questions refer specifically to contaminated or potentially dangerous items that are being disposed of. They do not refer to items that will be reused. The types of items we are referring to are those contaminated by blood or infection (e.g. bandages), intravenous tubing or bottles, etc. There should be no needles, syringes, old IV bottles or tubing, or other waste from medical materials lying in the open. Some facilities may have a location where contaminated waste materials are placed prior to processing for destruction. In this case the waste may be visible, but must be protected. "Protected" refers to some barrier that prevents people or animals from getting to the waste materials. Be certain to go to the site where the materials are disposed of to determine if the waste is visible and if visible, whether it is protected or not.

212 Infection control committee: Any document that verifies that the committee actually meets (minutes, agenda, notes from last meeting) are accepted as documentation for an active infection control committee.

213 Disinfection: The disinfection process in this question refers to placing potentially hazardess materials (e.g. blood or body fluids) immediately into a disinfecting solution **PRIOR TO CLEANING** and then subsequently cleaning. Some facilities may only clean with soap and water, or may place equipment into a dry container or a container with only water, prior to washing. If equipment is not soaked in a disinfectant solution, but is either not soaked, or is soaked in plain or soapy water, but then is washed with soap and water, the correct response will be "NO".

214-215 Final process: This refers to the final process applied to equipment prior to reuse. You must verify that the equipment is available and functioning. If one or more of the methods used for sterilization identified in question 214 are functioning, then indicate in question 215 that the method is functioning. Functioning includes verifying that the source of power (electricity, gas stove, wood, or other) is available at the time of your visit (see note below). If the equipment is present but *none* of them can reach the required temperature either because the power source is lacking or the equipment is broken, the correct response will be "OBSERVED, NOT FUNCTIONAL".

Common methods for processing equipment include:

- Dry heat (sterilizer): This is most often operated by electricity.

- Autoclave (sterilizer): The autoclave sterilizes by steam and under pressure. Ask to make sure the pressure component works. You can take the word of the staff if the item is not being used at the time.

- Pot for Steam/boil disinfecting (high level disinfectant-HLD): The pot that is used for both systems must have a lid. Steam places cleaned items on a rack over boiling water, boiling places them directly in the water.

- Chemical (most often HLD): You must check for a chlorine solution, calcium hypochlorite powder, chloramine, sodium hypochlorite solution (JIK), dettol, Glutaraldehyde or Cidex. During training, discuss other chemical disinfectants that are accepted for final processing of equipment.

Note: Power source: The source for the heat (either electricity or gas) for the autoclave, dry heat, or steam/boil system (whichever system is used) must be available and functioning the day of the survey. You must observe the heat source and fuel, if fuel is used. If the equipment is electric and the electricity is not functioning the day of the survey, there is no heat source. If the staff indicate that generator power is available if they need it, you may indicate "reported available" if the generator is not operating at any time during the visit. If the generator is operating, "OBSERVED" is the correct response.

216 Infection control protocols: These may be either the official MoH protocols, or may be facility or NGO standards that are written. They may be posted on a wall.

217 Electricity: This refers to a wired source of electricity. A battery that powers a single light bulb does not count; a solar or hydro power source is acceptable. Facility generator power does not count for this question (information on generator power and fuel for the generator is collected in 219). Regardless of source of electricity, it must be sufficient for operating sterilization equipment.

218 Availability of electricity: If the facility does have electricity, note how often it is available.

219 Backup generator: You may accept the word of the respondent.

220 Water source location: The question refers to the source of water for the facility. On-site is on the grounds or inside the facility. Sources includes a tank, piped water, water from a well or bore hole.

221 Latrine: Interviewer must observe the latrine. If it is stopped up, it does not function. If the latrine is locked and the key is not available, or the latrine is only for staff, the answer is "NO".

PART I, SECTION 3, 300 - 314: LABORATORY DIAGNOSTICS

Ask to speak to the person who is available who is most knowledgeable about the laboratory tests and procedures. We are accepting the report of the respondent regarding the availability of equipment and supplies.

300 Confirm that the facility has the capacity to run laboratory tests for HIV, TB and syphilis.

301 Record the qualification of the person in charge.

302 HIV Tests: If the facility offers HIV tests, go to Part II to fill out tables 426, 427.

Note: When you are looking at the stock status of each brand of HIV test kits, the correct number to record is the number of actual tests. These may vary per kit, even for the same brand. For example, a kit of Serocard could contain 100 tests or 40 tests depending on the source.

304-6 Tuberculosis sputum test: This requires a functioning microscope, slides for fixing the sputum specimen, and reagents (chemicals) to prepare the specimen for reading under the microscope. Record whether all equipment and reagents are available to complete the test.

308-310 Syphilis test: The VDRL requires a functioning microscope as well as the VDRL kit. The RPR is a specific kit. Record whether all equipment and reagents are available to complete the test.

308: RPR = Rapid Plasma reagin
309: For the RPR test kit you must confirm that the RPR kit includes test cards, reagent, automatic rotating table and pipettes

303, 307, 311 Registers: Facilities may have separate registers for different tests, or may have one register where all tests are recorded. If it is one register, you must verify that there is a test related to the subject in question (e.g., tuberculosis sputum smear) recorded in the book, for the register to count.

312-316 HIV test kit storage: Indicate the number of functioning refridgerators and whether temperature is monitored.

317 Infection control items for laboratory: Note whether observed, reported available or not available.

318 Staff interview: If more than one laboratory staff are present find out which staff conduct any of the HIV, STI, or TB tests, and interview a) the most senior; b) randomly select a second staff.

319-320 Staff training: Note any training received in conducting HIV, TB and syphilis test in the past 3 years. D) Then, if staff received training in laboratory diagnosis using HIV tests, specify the HIV tests they were trained to use, based on those listed.

321 HIV test kits: list all HIV test kits that are managed by this facility and specify their principle usage, as the primary test, secondary test or confirmatory/tie-breaker test.

PART II, 400 - 438: COMMODITY MANAGEMENT

A logistics system provides excellent customer service by fulfilling the six rights:

the right goods, in the right quantities, in the right condition, are delivered to the right place, at the right time, for the right cost

Logistics management includes a number of activities that support the six rights. Over the years, logisticians have developed a systemic approach to describing the activities of a logistics system, the logistics cycle (refer to handout 1). There are also some key logistics terms (refer to handout 2).

Based on this cycle it is important to find out if it is working properly by measuring certain process and outcome indicators on logistics system performance and supply availability. The remainder of the tool will do just that.

400 Complete the table on the respondents interviewed at the facility.

401 Note whether stock cards and LMIS reports are found at the facility. If neither are available, skip to question 409. If one of the two is available, continue the questions.

402 Note whether stock cards and LMIS forms are actually used at the facility. If neither are used, skip to question 406. If one of the two is available, continue the questions.

403 – 420 Complete questions as written, paying attention to instructions. If you check "other" in response to any of the questions, please clarify what is meant in the space provided and/or the notes section of the questionnaire.

421-425 For the commodities listed, check only for the presence of at least one non-expired unit of each product.

Table 426 STOCK STATUS TABLE: Complete the following table for authorized products only using the following guidelines:

Columns:

1. All of the authorized products that will be studied are listed.
2. The units of count for each product are identified (e.g. cycles, vials, tablets, pieces, etc).
3. Identify which products are managed by this facility by answering yes or no for each product.
4. Enter the total consumption or issues for the months of December 2001 to May 2002. If less than 6 months of data available, gather data for as many months as possible.
5. Record the number of months the total consumption was based on (should be 6 in most cases). If less than 6 months of data were available or if a stockout occurred during this time period, reduce the number of months of data available by half months or full months only. For example, if a stockout occurred and lasted from 1 day to 2 weeks, reduce your total no. of months by 0.5 for each stockout that occurred. If the stockout lasted between 2 to 4 weeks, reduce your total no. of months by 1 for each stockout that occurred.
6. Record usable stock on hand based on a physical inventory of each product. For opened containers, estimate the remaining amount.
7. Record usable stock on hand based on stock ledgers or stock cards for each product. If there are no stock cards write "**no stock cards**".
8. Indicate whether or not an order has been placed with a yes or no.
9. Enter the total amount of expired quantities of products that are on the shelf or anywhere inside the storeroom for each product.

Note: When you are looking at the stock status of each brand of HIV test kits. The correct number to record is the number of actual tests. These may vary per kit, even for the same brand. For example, a kit of Serocard could contain 100 tests or 40 tests depending on the source.

Note: For the blister packs the unit of count will be individual packets for the treatment of TB. The packs for continuing treatment will not be counted.

Table 427: STOCKOUT ASSESSMENT TABLE: Review the stock cards for the months of December 2001 to May 2002 to identify if any products stocked out. Alternatively, ask knowledgeable staff to identify if any products have stocked out during this period.

For all products that are both checked as available products and had a stockout between December 2001 and May 2002, complete the following table.

♦**Note*: It may be necessary to use more than one line per product in the table as, for example, there may have been 3 different stockouts of Depo-Provera in the last six months.***

Columns:
1. Enter any products managed by this facility from the Stock Status Table that had a stock out during the period December 2001 to May 2002.
2. Record if there is a stock card available during this 6-month period by answering yes or no.
3. Record if there is a stock card that has been updated during this 6-month period by answering yes or no.
4. Enter whether there was a stock out at the time of the visit for each product.
5. Enter the date (or estimated date) the stock out began. If the stockout began prior to December 1, 2001, and continued into this 6-month period, enter "December 1, 2001" as the stockout start date.
6. Enter the date the stock out ended. If the stockout is on-going on the day of the visit, enter "on-going."
7. Tick ***column 7*** if the date of the stockout has been taken from the stock cards or other logistics records.
8. If you are unable to identify or verify a stockout with the stockcards or other logistics records, tick ***column 8*** if an informant has estimated the date of the stockout.
9. Enter the reason for the stockout. Please use the following codes:

Reason for stockout:
1= Higher level facility did not send enough products
2= Higher level facility did not send products in time
3= Increase in consumption
4= Did not request the correct amount
5= Did not request products at the correct time
6= Insufficient resources (financial, human or transport, specify)
7= Other reasons and state the reason

Table 428: PERCENT DIFFERENCE BETWEEN QUANTITY ORDERED AND QUANTITY RECEIVED:

Columns:
1. Products to be reviewed are listed in column 1.
2. Their units are listed in column 2.
3. Enter the quantity ordered in the last filled order of record.
4. Enter the date the last filled order was placed.
5. Enter the quantity received in last filled order.
6. Enter the date the last filled order was received.
7. Write comments in column 7.

TABLE 429: STORAGE CONDITIONS TABLE

Above the chart, circle all types of health commodities that are stored/contained in the facility store or warehouse that you are assessing.

Items 1-13 should be assessed for all facilities. A separate table should be filled out for each storage area housing products being assessed. Please specify the types of products being assessed in the storage area by circling the category (ies) of products at the top of each table.

Only assess the storage areas using this table for the following product categories: contraceptives, opportunistic infection drugs, malarial drugs, STI drugs, TB medications.

Place a tick mark in the appropriate column based on visual inspection of the storage facility, noting any relevant observations in the Comments column***. To qualify as "yes," all products and cartons must meet the criteria for each item***.

430-431 Complete questions as written, paying attention to instructions.

432 Record end time of interview
433 Record duration of interview
434 Total number of provider questionnaires completed at facility: The team should complete this when the work at the facility is completed. Ensure that there is a completed questionnaire for every provider interview indicated.

The data collected using part II of the instrument can be used to calculate a handful of key logistics indicators. Refer to handout #3.

TYPES OF DATA SOURCES FOR COMMODITIES MANAGEMENT: REFER TO UGANDAN STOCK CARDS AND LMIS REPORTS

VII PROVIDER INTERVIEW, 100 – 113

Every effort should be made to complete the Provider Interview for service providers in the area of VCT, PMTCT, STIs and TB if they are available at the facility at the time of the visit.

Complete the front page with the facility identification and information about the interview. This information should match that of the facility questionnaire.

100: If you are meeting the informant for the first time, introduce the study team members and the objectives of the study. Sign the space provided to confirm that you have received consent to conduct the interview.

101 – 103: Complete questions as written.

104: Record the informant's responses for each service provided (or not) specifically for HIV/AIDS clients.

105 - 109: Record the informant's responses regarding each area of training and service.

110: Complete the question as written. Supervision is limited to that received from outside the facility (usually the next highest level). Or, if you are interviewing a provider from a large facility, the next highest level may include a supervisor from the same facility, but from another or higher level service unit in the same facility.

112: Record the time the interview ended.

FACILITY SERVICES AND INFRASTRUCTURE

FACILITY IDENTIFICATION

Name of the facility_____	
Facility location_____	
District _____	DISTRICT…… ☐☐
Sub-district _____	SUB-DISTRICT…… ☐☐
Code of the facility.....	FACILITY CODE ..... ☐
Facility Type: (1 = Referral hospital; 2 = District hospital; 3= Health center IV; 4 = Health center III; 5 = Health center II; 6 = District warehouse; 7=Other _____)	FACILITY TYPE..... ☐
Operating Authority: 1= government; 2 = non-governmental 6= Other _____)	OPERATING AUTHORITY..... ☐
Facility characteristics: (1 = urban; 2 = rural)……..	URBAN/RURAL…….. ☐
(1 = warehouse; 2 = SDP)……..	WAREHOUSE/SDP……. ☐

INFORMATION ABOUT INTERVIEW

Date:_____ ____	DAY/ MONTH/ YEAR ☐☐ ☐☐ ☐☐☐☐
Name of the team leader_____	TEAM CODE ..... ☐☐
Time interview started:	HOUR:MINUTES.... ☐☐ ☐☐

PART I: FACILITY INFRASTRUCTURE AND SERVICES OFFERED

ASK TO TALK WITH THE INCHARGE FOR OUTPATIENT SERVICES.INTRODUCE ALL TEAM MEMBERS AND ASK FACILITY REPRESENTATIVES TO INTRODUCE THEMSELVES.

EXPLAIN THE OBJECTIVES OF THIS SURVEY:
As part of their on-going monitoring and evaluation of the Ministry of Health and USAID-supported programs, the MOH and its USAID partners are conducting a nationally representative survey for government and NGO facilities on logistic system performance and HIV/AIDS supported activities. We are visiting health facilities throughout the country and this facility was randomly selected to be included in the survey. The general objectives of the survey are as follows:

- Collect current information on logistics system performance and stock status of key health commodities, prior to the introduction of the new "pull" request and distribution system for the health commodities.
- Collect current information on the availability of HIV/AIDS prevention, care and support services, including other STIs, TB and other opportunistic infections, prior to the expansion of these services throughout the country.
- Collect information on the training of staff who manage and/or provide these services.

The results of this national survey will provide information to health planners and to organizations that work in these areas to promote improvements in system performance and the quality of services. This data will also be used to measure the changes in logistics system performance and in HIV/AIDS support services as a result of support to the Ministry of Health through the DELIVER project, the AIM project and other USAID projects.

We would like to ask you a few questions about the services, commodities and supplies available at this facility, and then we will be asking to see some of the places, or items that we have asked about. We would also like to interview some of the staff who provide the services we are asking about. Any information we collect today will be confidential and not identified with this facility. Do you have any questions?

NO.	QUESTION	CODE CLASSIFICATION	GO TO
01	Can we continue?	YES..... 1 NO..... 2	➔STOP
02	What is the defined catchment population for this facility?	POP. ☐ ☐☐ ☐☐☐ DON'T KNOW.....999 998 NO DEFINED POP.....000 000	

PART I, SECTION 1: ASSESSMENT OF SERVICES OFFERED FROM INCHARGE OF OUTPATIENT SERVICES

First I want to ask some general questions about specific services that are provided and the organization of service delivery at this facility. Then, I would like to speak with the person or people responsible for providing each service your facility offers to ask for some more detailed questions for each service offered.

COMPLETE **TABLE 03, 101-110** WITH THE INCHARGE FOR OUTPATIENT SERVICES IN ORDER TO IDENTIFY THE SERVICES OFFERED AND TO PLAN THE DATA COLLECTION STRATEGY. THEN, IDENTIFY LOCATIONS TO BE VISITED AND STAFF TO BE INTERVIEWED IN **TABLE 04**. SELECT THE PERSONS YOU WILL INTERVIEW (UP TO 4 SERVICE PROVIDERS) AND ASK THE INCHARGE TO ENSURE THAT STAFF DO NOT LEAVE PRIOR TO THE INTERVIEW. THE PROVIDER INTERVIEW WILL TAKE ABOUT 5 MINUTES AT MOST.

Does this facility provide the following services? TICK BOX FOR RESPONSE.

03	HIV/AIDS service	Yes today	Yes, but not today	No, refer clients	No
101	VCT				
102	PMTCT				
103	"Youth Friendly" programs				
104	Activities for OVCs				
105	Social support/post test services for HIV+ & family				
106	Home-based care				
107	Management (prevention, diagnosis and treatment) of OIs in HIV/AIDS patients				

03	HIV/AIDS service	Yes today	Yes, but not today	No, refer clients	No
108	STIs				
109	Diagnosis of TB				
110	Treatment of TB				

FOR PART I, SECTION 1, QUESTIONS 101-110 A-L, YOU WILL WANT TO TALK WITH THE PERSON MOST KNOWEDGEABLE ABOUT EACH SPECIFIC HIV/AIDS RELATED SERVICE PROVIDED BY THE FACILITY:

FOR PART I, SECTION 2: SHARPS MANAGEMENT AND INFECTION CONTROL, YOU WILL WANT TO VISIT THE ROOM WHERE THERAPEUTIC INJECTIONS ARE MOST COMMONLY GIVEN AND ASK TO SPEAK WITH THE PROVIDER OFFERING THESE SERVICES ON THE DAY OF THE VISIT.

FOR PART I, SECTION 3: LABORATORY DIAGNOSTICS, YOU WILL WANT TO VISIT THE LABORATORY AND INTERVIEW THE PERSON IN CHARGE. IF THE LAB IS CLOSED, CONTINUE TO INTERVIEW THE PERSON MOST KNOWLEDGABLE ABOUT THE LABORATORY SERVICES.

FOR PART II: COMMODITY MANAGEMENT, YOU WILL WANT TO VISIT THE STOREROOM OR STORAGE AREA AND ASK TO SPEAK WITH THE PERSON RESPONSIBLE FOR PHARMACEUTICALS.

YOU WIILL WANT TO INTERVIEW SERVICE PROVIDERS ABOUT THE INSERVICE TRAINING THEY HAVE RECEIVED OVER THE PAST THREE YEARS. ONCE YOU HAVE LISTED ALL OF THE PROVIDERS WHO OFFER THESE SERVICES, PLUS THE INJECTION STAFF, LABORATORY STAFF AND LOGISTICS MANAGERS IN THE TABLE 04 BELOW, SELECT THE SERVICE PROVIDERS THAT YOU WILL REQUEST TO INTERVIEW. YOU WILL NOT CONDUCT INDIVIDUAL PROVIDER INTERVIEWS WITH THE LABORATORY STAFF OR THE LOGISTICS MANAGERS. INTERVIEW UP TO FOUR PROVIDERS OF THE HIV/AIDS SERVICES COVERED IN THIS SURVEY (NOS. 1-10 BELOW). IF THERE ARE MORE THAN 4 PROVIDERS OFFERING THESE SERVICES, PRIORITIZE INTERVIEWS WITH THE PROVIDERS OF THE FOLLOWING KEY SERVICES: VCT, PMTCT, TB AND STIs.

04: LISTING OF STAFF TO INTERVIEW AND LOCATIONS TO VISIT				
NO	SERVICE CATEGORY OR FUNCTIONAL AREA	NAME OF STAFF TO BE INTERVIEWED	LOCATION	SELECTED FOR INTERVIEW (✓)
1	VCT			
2	PMTCT			
3	"Youth Friendly" programs			
4	Activities for OVCs			
5	Social support/post test services for HIV+ and family			
6	Home-based care			
7	Management (prevention, diagnosis and treatment) of Ois in HIV/AIDS patients			
8	STIs			
9	Diagnosis of TB			
10	Treatment of TB			
11	Therapeutic injections			
12	Laboratory services			
13	Commodity management			

YOU WILL WANT TO VISIT THE WAREHOUSE, STOREROOM OR STORAGE AREA WHERE THE HEALTH COMMODITIES LISTED BELOW ARE MANAGED AND ASK TO SPEAK WITH THE PERSON RESPONSIBLE FOR PHARMACEUTICALS.

HIV tests
1) Capillus-CC
2) Bionor-CC
3) Determine
4) Serocard-CC
5) Hema-strip
6) Multispot/Ginne-CC
7) Unigold

Contraceptives:
8) Microgynon oral pill
9) Male condom
10) Depo-Provera

Opportunistic infection drugs:
11) Fluconazole/Diflucan
12) Cotrimoxazole/Septrim
13) Aciclovir/Zovirax/Cyclovax

Malarial drugs:
14) Chloroquine
15) Sulphadoxine Pyrethamine (Fansidar)

STI drugs:
16) Ciprofloxacin/Cipro
17) Benzathine penicillan
18) Doxycycline
19) Metronidazole/Flagyl

ARVs:
20) Nevirapine
21) ddI/videx
22) d4t/stavudine
23) AZT/Zidovudine

TB medications:
24) Blister pack, 1st treatment
25) Ethambutol
26) Isoniazide
27) Rifampicin

Other commodities:
28) Disinfectant (JIK)
29) Unused sharps boxes
30) Plastic trash liners for wet waste
31) Clean gloves
32) Disposable pipettes/Disposable tips for pipettes

PART I, SECTION 1, QUESTIONS 101-110 A-L: SPECIFIC HIV/AIDS RELATED SERVICE INFORMATION

ASK TO SPEAK WITH THE PERSON WHO IS MOST FAMILIAR WITH EACH OF THE SPECIFIC HIV/AIDS RELATED SERVICE FOR WHICH YOU ARE COLLECTING INFORMATION. GO TO THE AREA WHERE THE SERVICE IS PROVIDED AND EXPLAIN TO THE INFORMANT:

I am going to ask you about different types of services, including diagnosis and treatment, that are provided at this facility that are related to different infectious diseases, including HIV/AIDS, STIs and opportunistic infections, including TB. I will ask you specific questions about these services, including whether there are any other organizations that work with you to ensure that the service is provided the catchment population.
I will be asking for information on clients that received services last month, and on the staff who provide services. If you are responsible for more than one of these services, please let me know now and we can complete all sections for which you are the best person to provide information.

	101 VCT SERVICES	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED..... 1 YES, TODAY, REPORTED..... 2 YES, NOT TODAY..... 3 NO, REFER ..... 4➔102 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO ..... 6➔102
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS ..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE ..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	COUNSELING FOR ALL CLIENTS ON REQUEST .....A TEST ON REQUEST..B COUNSELING FOR ALL CLIENTS AFTER RECEIVING TEST.....C OUTREACH .....D
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE ..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES ..... 1 NO ..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8

	101 VCT SERVICES	
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NO 3
L	USING THE REPORT FOR THE MONTH OF MARCH 2002, OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE.	☐☐☐ DON'T KNOW ..... 998 NONE 000

	102 PMTCT SERVICES	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED..... 1 YES, TODAY, REPORTED..... 2 YES, NOT TODAY..... 3 NO, REFER ..... 4➔103 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO ..... 6➔103
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS ..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE ..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	HIV TEST FOR PREG. WOMAN .....A COUNSEL ON BREAST FEEDING .....B ART (NEVIRAPINE OR AZT) .....C PROVIDE MILK FORMULA.....D OUTREACH .....E
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE ..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support to this facility for this service?	YES ..... 1 NO ..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐

	102 PMTCT SERVICES	
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY ..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NO 3
L	USING THE REPORT FOR THE MONTH OF MARCH 2002, OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE.	☐☐☐ DON'T KNOW ..... 998 NONE 000

	103 PROGRAMS THAT ARE SPECIFICALLY FOCUSED FOR ADOLESCENTS ("YOUTH FRIENDLY")	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED ..... 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔104 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔104
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS ..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE ..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	GROUP MEETINGS FOR YOUTH ..... A INFORMATION CAMPAIGNS FOR YOUTH ..... B VCT ..... C STI DX AND TX ..... D FAMILY PLANNING ... E SAFE MOTHERHOOD F OUTREACH ..... G

	103 PROGRAMS THAT ARE SPECIFICALLY FOCUSED FOR ADOLESCENTS ("YOUTH FRIENDLY")	
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support to this facility for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3

	104 TARGETED ACTIVITIES FOR ORPHANS/VULNERABLE CHILDREN (OVC)	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED ..... 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔105 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔105
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE..... 00 DON'T KNOW 98

	104 TARGETED ACTIVITIES FOR ORPHANS/VULNERABLE CHILDREN (OVC)	
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	COUNSELING.....A PROVIDE GOODS/ FUNDS/ECONOMIC SUPPORT.....B ORGANIZED SUPPORT GROUP ACTIVITIES.....C OUTREACH .....D
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support to this facility for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3

	105 SOCIAL SUPPORT/POST-TEST SERVICES TARGETED TO HIV+ AND FAMILY	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED ..... 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔106 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔106
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐

	105 SOCIAL SUPPORT/POST-TEST SERVICES TARGETED TO HIV+ AND FAMILY	
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	COUNSELING FOR HIV+ CLIENT .....A PROVIDE GOODS/ FUNDS/ ECONOMIC SUPPORT.....B SOCIAL SUPPORT PROGRAMS .....C **OUTREACH ……..D**
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3

	106 HOME-BASED CARE	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY, OBSERVED ..... 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔107 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔107
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8

	106 HOME-BASED CARE	
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE ..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	PROVIDE SERVICES IN HOMES ..... A TRAIN CARETAKERS ..... B MATERIAL SUPPORT ..... C COMMUNITY EDUCATION AND ADVOCACY ..... D OUTREACH ..... E
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE ..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES ..... 1 NO ..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAY ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY ..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NO 3

	107 MANAGEMENT OF OPPORTUNISTIC INFECTIONS IN HIV/AIDS PATIENTS (PREVENTION, DIAGNOSIS, TREATMENT)	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY,OBSERVED .. 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔108 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔108

	107 MANAGEMENT OF OPPORTUNISTIC INFECTIONS IN HIV/AIDS PATIENTS (PREVENTION, DIAGNOSIS, TREATMENT)	
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	LAB DIAGNOSIS.....A X-RAY SERVICE.....B PRESCRIBE DRUGS FOR Ois .....C COUNSELING FOR POSITIVE LIVING .....D OUTREACH .....E
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3

	108 SEXUALLY TRANSMITTED INFECTIONS	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY,OBSERVED .. 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔109 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔109
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	ROUTINE SYPHILIS TEST .....A SYPHILIS TEST ON REQUEST .....B COUNSELING ABOUT STIs.....C SYNDROMIC DIAGNOSIS .....D PRESCRIBE MEDICATIONS .....E OUTREACH .....F
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8

	108 SEXUALLY TRANSMITTED INFECTIONS	
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3
L	USING THE REPORT FOR THE MONTH OF MARCH 2002, OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE.	TOTAL: ☐☐☐ DON'T KNOW ..... 998 NONE..... 000

108 L continued	HOW MANY CLIENTS WITH THE INDICATED SYMPTOMS ATTENDED THE CLINIC DURING THE MONTH OF MARCH 2002? THIS SHOULD BE TAKEN FROM THE MONTHLY STI SUMMARY REPORT. IF ANY SYMPTOM IS NOT TRACKED SEPARATELY ON THE REPORT, WRITE "NA" FOR NOT APPLICABLE IN THE BOXES.	1 URETHRAL DISCHARGE……..	☐☐
		2 VAGINAL DISCHARGE.....	☐☐
		3 LOWER ABDOMINAL PAIN (NO RECORD OF VAGINAL DISCHARGE)	☐☐
		4 GENITAL ULCERS	☐☐
		5 OTHER PROBABLE STI DIAGNOSIS	☐☐

	109 DIAGNOSIS FOR TUBERCULOSIS	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY,OBSERVED .. 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔110 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔110
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE..... 00 DON'T KNOW 98

	109 DIAGNOSIS FOR TUBERCULOSIS	
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	ROUTINE SPUTUM TEST .....A TEST ONLY IF SYMPTOMATIC.....B CLINICAL DIAGNOSIS WITHOUT LAB TEST ……C X-RAY SERVICE…….D OUTREACH……. E
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support <u>to this facility</u> for this service?	YES..... 1 NO..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NONE AVAILABLE..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN..... 2 NO..... 3
L	USING THE REPORT FOR THE MONTH OF <u>MARCH 2002</u>, OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE.	☐☐☐ DON'T KNOW ..... 998 NONE..... 000

	110 TREATMENT FOR TUBERCULOSIS	
A	Does this facility provide this service? IF YES, INDICATE IF THE SERVICE IS AVAILABLE TODAY. IF REFER, INDICATE IF THERE IS A SPECIFIC LOCATION FOR THIS SERVICE WHERE THE CLIENT IS REFERRED TO.	YES,: TODAY,OBSERVED .. 1 YES, TODAY, REPORTED ..... 2 YES, NOT TODAY ..... 3 NO, REFER .....4➔200 _____ (SPECIFY PLACE CLIENT IS REFERRED TO) NO .....6➔200
B	Is this service offered as a unique service where only clients with AIDS related issues are seen and by specific staff assigned to work with the program or is it offered as a part of general services?	UNIQUE FOR HIV/AIDS..... 1 INTEGRATED WITH GENERAL SERVICES 2 BOTH ..... 3 DON'T KNOW 8

	110 TREATMENT FOR TUBERCULOSIS	
C	How many staff are directly involved with client counseling, diagnosis or management for this service? INCLUDE ALL STAFF WHO HAVE RESPONSIBILITY FOR ANY OF THESE ACTIVITIES AT ANY TIME, EXCLUDING THE LAB TECHNICIAN.	☐☐
D	Among these staff, how many have received any in-service training related to this service within the prior 3 years?	☐☐ NONE ..... 00 DON'T KNOW 98
E	Does the facility offer the following program components as part of this HIV/AIDS-related service? CIRCLE ALL ROUTINE PROGRAM COMPONENTS OFFERED BY FACILITY. DO NOT CIRCLE THE ITEM IF THE SERVICE IS PROVIDED ELSEWHERE AND THIS FACILTY ONLY REFERS FOR THE INDICATED SERVICE.	DOTS ..... A PRESCRIBE MEDICATION (NON-DOTS) ..... B OUTREACH C
F	How many days during the month of March 2002 was the service, funded by this facility, actually provided as outreach?	☐☐ NONE ..... 00 DON'T KNOW 98
G	Are there any partner organizations, that is organizations that provide staff or technical support to this facility for this service?	YES ..... 1 NO ..... 2 DON'T KNOW 8
H	How many days per week is this service available?	DAYS ☐
I	Do you have clinical guidelines or protocols for how the facility is to provide this service? IF YES, MAY I SEE THEM? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW ..... 8 IF YES, SPECIFY ..... _____
J	Do you have any visual aids to use when providing this service? IF YES, may I see them? (TO SCORE 1 OR 2, THEY MUST BE IN SERVICE DELIVERY AREA OR IMMEDIATELY ADJACENT)	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NONE AVAILABLE ..... 3 DON'T KNOW 8
K	Do you have a register or other record where you record information on clients who receive this service? IF YES, ASK TO SEE THE REGISTER	YES, OBSERVED ..... 1 YES, NOT SEEN ..... 2 NO 3
L	USING THE REPORT FOR THE MONTH OF MARCH 2002, OR COUNTING FROM REGISTER, IF REPORT NOT AVAILABLE, INDICATE HOW MANY CLIENTS RECEIVED THIS SERVICE.	☐☐☐ DON'T KNOW ..... 998 NONE 000

PROVIDER INTERVIEWS:
AS YOU COMPLETE EACH SECTION OF THE QUESTIONNAIRE WITH EACH SERVICE PROVIDER, CARRY OUT THE PROVIDER INTERVIEWS BASED ON THOSE STAFF SELECTED WITH THE INCHARGE AND USING THE PROVIDER INTERVIEW INSTRUMENT. EACH INTERVIEW WILL TAKE NO MORE THAN 5 MINUTES.

PART I, SECTION 2: SHARPS MANAGEMENT AND INFECTION CONTROL

ASK TO SEE THE ROOM WHERE THERAPEUTIC INJECTIONS ARE MOST COMMONLY GIVEN AND ASK TO SPEAK WITH THE PROVIDER OFFERING THESE SERVICES ON THE DAY OF THE VISIT. IF SERVICES ARE NOT BEING OFFERED ON THE DAY OF VISIT, RECORD AS MANY OF THE OBSERVATIONS AS POSSIBLE.

NO.	QUESTIONS	CODE CLASSIFICATION			GO TO
200	INDICATE IF THE FACILITY IS OPEN FOR CLIENT SERVICE AT THE TIME THE SURVEY IS BEING CONDUCTED.	YES, OPEN REGULAR SERVICE .....1 YES, OPEN FOR EMERGENCY.....2 CLOSED FOR CLIENT SERVICE.....3			
201	ITEMS REQUIRED TO PROVIDE INJECTION SERVICES (IN ROOM OR IMMEDIATELY ADJACENT)	OBSERVED	REPORTED AVAILABLE	NOT AVAILABLE	
	A) Sharps container	1	2	3	
	B) 5 or more 2, 3 or 5 ml disposable syringes (w/ 21 gauge needles)	1	2	3	
	C) Waste receptacle with lid and plastic liner	1	2	3	
	D) Hand-washing items (soap)?	1	2	3	
	E) Water for hand-washing?	1	2	3➔203	
202	How is water made available for use in injection room in the facility <u>today?</u>	PIPED ....1 BUCKET W/ TAP..... ....2 BUCKET/BASIN 3			
203	Immediately after giving an injection, what do staff commonly do before disposing of the needle and syringe? CIRCLE ALL THAT APPLY	BREAK WITH PULLER, CUTTER, OTHER DEVICE..... ... A BEND BY HAND..... ... B SEPARATE NEEDLE FROM SYRINGE .... .C DISINFECT .... D NOTHING..... ... X OTHER _____ .... W			
204	How are the needle and syringe disposed of?	DROPPED DIRECTLY INTO SHARPS CONTAINER..... ....1 PUT INTO NON-SHARPS CONTAINER PRIOR TO FINAL DISPOSAL ....2 OTHER _____ 8			➔209
205	Does this facility ever <u>reuse</u> sharps containers?	YES ..... 1 NO..... 2 NEVER USES SHARPS CONT..... 3 DON'T KNOW 8			
206	Where are used sharps containers stored prior to disposal?	SECURE LOCATION, LIMITED ACCESS..... 1 SECURE LOCATION, OPEN ACCESS..... 2 NON-SECURE LOCATION ..... 3 DON'T KNOW 8			
207	How does this facility dispose of used sharps containers? CIRCLE ALL THAT APPLY	BURNED IN INCINERATOR ..... A BURNED IN OPEN PIT..... B BURNED AND BURIED ..... C BURIED..... D THROW IN TRASH/OPEN PIT..... E THROW IN PIT LATRINE..... F THROWN IN COVERED PLACENTA PIT..... G TRANSPORT OFFSITE W/ MUNICIPAL TRASH ..... H TRANSPORT OFFSITE SPECIAL DISPOSAL ..... I SOLD TO GARBAGE COLLECTORS OR RECYCLERS ..... J OTHER_____ ..... W			

208	INTERVIEWER: ASK TO SEE PLACE USED FOR FINAL DISPOSAL OF SHARPS BOXES AND DESCRIBE THE CONDITION	NO WASTE VISIBLE ……	1	
		WASTE VISIBLE, NOT PROTECTED	2	
		WASTE VISIBLE,PROTECTED	3	
		WASTE SITE NOT INSPECTED.....	8	
209	ASK TO SEE WHERE POTENTIALLY CONTAMINATED WASTE, USED NEEDLES AND ITEMS THAT ARE NOT RESUSED ARE STORED, PRIOR TO FINAL DISPOSAL AND DESCRIBE THE CONDITION	FIRMLY COVERED BIN.....	1	
		OPEN BIN, PROTECTED	2	
		OTHER PROTECTED AREA	3	
		OTHER NON-PROTECTED AREA	4	
		OTHER _____	6	
210	How does this facility dispose of potentially contaminated waste and items that are not reused (e.g. bandages, syringes)? IF DIFFERENT METHODS ARE USED AT DIFFERENT TIMES, CIRCLE ALL COMMON METHODS OF DISPOSAL.	BURNED IN INCINERATOR	A	
		BURNED IN OPEN PIT	B	
		BURNED AND BURIED	C	
		BURIED.....	D	
		THROW IN TRASH/OPEN PIT.....	E	
		THROW IN PIT LATRINE.....	F	
		TRANSPORT OFFSITE W/ MUNICIPAL TRASH	G	
		TRANSPORT OFFSITE SPECIAL DISPOSAL	H	
		SOLD TO GARBAGE COLLECTORS OR RECYCLERS	I	
		OTHER_____	W	
211	INTERVIEWER: ASK TO SEE PLACE USED FOR FINAL DISPOSAL OF POTENTIALLY CONTAMINATED WASTE (BANDAGES, ETC) AND DESCRIBE THE CONDITION OF THE AREA	WASTE VISIBLE, NOT PROTECTED	1	
		WASTE VISIBLE,PROTECTED	2	
		NO WASTE VISIBLE.....	3	
		WASTE SITE NOT INSPECTED.....	8	
212	Does this facility have an infection control coordinator or committee? IF COMMITTEE, ASK IF IT HAS MET WITHIN THE PRIOR 3 MONTHS AND ASK TO SEE ANY MINUTES OR DOCUMENTATION ABOUT THE MEETING. CIRCLE ALL THAT APPLY.	YES, COORDINATOR EXISTS.....	A	
		YES, COMMITTEE, DOCUMENT SEEN	B	
		YES, COMMITTEE,DOC. NOT SEEN	C	
		YES,COMM., NOT MET W/IN 3 MOS	D	
		NO COORDINATOR	E	
		NO COMMITTEE.....	F	
		DON'T KNOW	X	
ASK TO GO TO WHERE EQUIPMENT IS DISINFECTED AND/OR STERILIZED. ASK TO TALK WITH THE PERSON MOST FAMILIAR WITH THE PROCEDURES USED.				
213	Prior to cleaning, is used equipment soaked in a disinfectant? ACCEPT RESPONDENTS ANSWER	YES.....	1	
		NO.....	2	
		DON'T KNOW	8	
214	What is the final process most commonly used for disinfecting or sterilizing medical equipment (e.g., surgical instruments, speculums) prior to reuse? IF DIFFERENT METHODS ARE USED FOR DIFFERENT TYPES OF EQUIPMENT, CIRCLE ALL THE DIFFERENT METHODS.	DRY HEAT STERILIZATION.....	A	
		AUTOCLAVE.....	B	
		STEAM	C	
		BOILING.....	D	
		CHEMICAL	E	
		OTHER_____	W	
		NONE.....	Y	
215	ASK TO SEE THE EQUIPMENT REQUIRED FOR THE ABOVE, AND INDICATE IF THE EQUIPMENT (AND IF RELEVANT) ELECTRICITY OR OTHER SOURCES OF POWER ARE FUNCTIONAL THE DAY OF THE VISIT. FUNCTIONAL REFERS TO CAPACITY TO REACH REQUIRED TEMPERATURE. IF ONE OR MORE OF THE METHODS ARE FUNCTIONAL, MARK FUNCTIONAL. IF NONE ARE, MARK AS NOT FUNCTIONAL	OBSERVED, FUNCTIONAL.....	1	
		OBSERVED, NOT FUNCTIONAL ...	2	
		REPORTED, FUNCTIONAL.....	3	
		REPORTED, NOT FUNCTIONAL ...	4	
		NOT AVAILABLE.....	5	
		DON'T KNOW	8	

216	Do you have copies of the MoH Infection Control Protocols (ICP) or other Infection Control Protocols? IF YES, ASK TO SEE THE PROTOCOLS. TO SCORE A 1, 2 OR 3, THEY MUST BE EITHER IN THE AREA WHERE EQUIPMENT IS PROCCESSED OR IMMEDIATELY ADJACENT.	YES, MOH ICP SEEN ..... YES, OTHER ICP SEEN ..... YES, ICP NOT SEEN ..... NO..... DON'T KNOW	1 2 3 4 8	
NOW, I WANT TO ASK ABOUT OTHER RESOURCES THIS FACILITY HAS ACCESS TO THAT ARE REQUIRED FOR STERILIZATION AND INFECTION CONTROL:				
217	Does this facility ever have electricity for operating sterilization equipment? (from any source, but NOT INCLUDING backup generator) CIRCLE ALL THAT APPLY	YES, outside power source ..... YES, solar ..... YES, hydro ……..... YES, generator ……..... NO.....	A B C D E	➔220
218	Is the electricity always available during the times when the facility is providing services or is it sometimes interrupted? IF SOMETIMES INTERRUPTED, ASK: On how many <u>days</u> during the past week was the electricity <u>not available for two (2) or more hours?</u>	ALWAYS AVAILABLE ..... # OF DAYS <u>NOT AVAILABLE</u> PAST WEEK ☐	0	
219	Does this facility have a back-up generator? IF YES, ASK IF IT IS FUNCTIONING AND IF FUEL IS PRESENT OR NOT. ACCEPT THE WORD OF THE RESPONDENT.	FUNCTIONS, FUEL PRESENT..... FUNCTIONS, NO FUEL TODAY..... NOT FUNCTIONING..... NO BACK UP GENERATOR.....	1 2 3 6	
220	Is there a water source available on-site (that is within 500m) of the facility? IF YES, VERIFY IF WATER IS PRESENT TODAY.	YES, WATER ONSITE..... SOURCE ONSITE, NO WATER..... NO ONSITE SOURCE	1 2 6	
221	Does this facility have a functioning latrine that is available for client use? IF YES, ASK TO SEE THE LATRINE	YES, OBSERVED ..... YES, NOT SEEN..... NO.....	1 2 6	

PART I, SECTION 3: LABORATORY DIAGNOSTICS			
NO.	**QUESTIONS**	**CODE CLASSIFICATION**	**GO TO**
300	Does this facility have the capacity to run any of the following laboratory tests: HIV, tuberculosis or syphilis?	YES……..1 NONE.....2	➔400
ASK TO VISIT THE LABORATORY AND INTERVIEW THE PERSON IN CHARGE. IF THE LAB IS CLOSED, CONTINUE TO INTERVIEW THE PERSON MOST KNOWLEDGABLE ABOUT THE LABORATORY SERVICES.			
301	What is the qualification of the person who is in charge of the quality of the laboratory work?	LAB ASSISTANT CERTIFICATE ……..……1 LAB TECHNICIAN DIPLOMA.……...……..2 LAB TECHNOLOGIST DIPLOMA OR HIGHER ……..3 NONE……..4 OTHER_____ 6	
302	Do you have laboratory capacity to conduct HIV tests? IF YES, GO TO TABLE 426 AND 427 AND COMPLETE THE TABLES FOR HIV TESTS FOR ALL SECTIONS. THEN RETURN TO QUESTION 303.	YES ……1 NO HIV TESTS CONDUCTED…2	➔304
303	Is there a register where laboratory test results for HIV tests are recorded? IF YES, ASK TO SEE THE RELEVANT REGISTER.	YES, REGISTER SEEN……. 1 YES, REGISTER NOT SEEN …2 NO REGISTER …….. 3	
304	Do you have laboratory capacity to test sputum for TB?	YES ……1 NO TB TESTS CONDUCTED... 2	➔308
305	Do you have all equipment and reagents required for testing sputum for tuberculosis today?	YES.…… 1 NO ……..2 DON'T KNOW.……..8	➔307
306	Is the following equipment available today to test sputum for tuberculosis? CIRCLE ANY COMPONENTS THAT ARE AVAILABLE TODAY	FUNCTIONING MICROSCOPE A GLASS SLIDES……B CRYSTAL VIOLET……C LUGOLS IODINE……..D ACETONE……..E NEUTRON RED……F OTHER _____……W	
307	Is there a register where laboratory test results for tuberculosis are recorded? IF YES, ASK TO SEE THE RELEVANT REGISTER.	YES, REGISTER SEEN……..1 YES, REGISTER NOT SEEN……2 NO REGISTER……3	
308	Do you have laboratory capacity to test for syphilis? IF YES, WHICH TEST DO YOU USE?	YES, VDRL……1 YES, RPR……2 NO SYPHILLIS TESTS CONDUCTED…… 3 OTHER _____ 6	➔312
309	Do you have all equipment and reagents required to conduct syphilis tests today?	YES.…… 1 NO…… 2 DON'T KNOW ……8	➔311
310	Is the following equipment available today to test for syphilis? CIRCLE ANY COMPONENTS THAT ARE AVAILABLE TODAY.	FUNCTIONING MICROSCOPE A VDRL KIT……B RPR KIT……C OTHER _____ W	
311	Is there a register where laboratory test results for syphilis are recorded? IF YES, ASK TO SEE THE RELEVANT REGISTER.	YES, REGISTER SEEN……1 YES, REGISTER NOT SEEN .....2 NO REGISTER ……3	

ANSWER QUESTIONS 312-316 ONLY IF THE FACILITY MANAGES HIV TEST KITS AND YOU ARE ABLE TO VISIT THE COLD CHAIN STORAGE AREA.

NO.	QUESTIONS	CODE CLASSIFICATION	GO TO
312	Do you have a functioning refrigerator(s) to store HIV test kits?	YES NUMBER____……1 NO……2 NOT APPLICABLE ……3	 ➔317 ➔317
313	Write down the actual temperature by looking at the internal thermometer inside the fridge (ideally temperature should be between 2 and +8 degrees centigrade) NOTE IF THERMOMETER BROKEN OR MISSING	TEMPERATURE (CENTIGRADE) ☐☐	
314	Are refrigerators located away from any surrounding objects?	YES……1 NO……2	
315	Is the temperature chart up-to-date? (in order to be up-to-date, there has to be an entry for the day of the visit)	YES……1 NO……2 NO CHART AVAILABLE……3	
316	Do you have a sufficient supply of electricity, paraffin, gas or solar panels for HIV/AIDS cold chain purposes?	YES……1 NO……2	

317	INFECTION CONTROL ITEMS REQUIRED TO PROVIDE LABORATORY SERVICES (IN ROOM OR IMMEDIATELY ADJACENT)	OBSERVED	REPORTED AVAILABLE	NOT AVAILABLE	
	A) Sharps container	1	2	3	
	B) 5 or more 2, 3 or 5 ml disposable syringes (w/ 21 gauge needles)	1	2	3	
	C) Waste receptacle with lid and plastic liner	1	2	3	
	D) Hand-washing items (soap)?	1	2	3	
	E) Water for hand-washing?	1	2	3	

318	IS A PERSON WHO CONDUCTS ANY OF THESE LAB TESTS PRESENT? IF MORE THAN TWO, RANDOMLY SELECT TWO STAFF WHO CONDUCT ANY OF THESE TESTS FOR QUESTIONS 319 (AND 320).	YES……1 NO……2	➔321

	319 LAB STAFF #1			320 LAB STAFF #2		
I'M GOING TO ASK YOU ABOUT DIFFERENT LABORATORY TESTS. HAVE YOU RECEIVED ANY IN-SERVICE TRAINING IN THE LAST THREE YEARS IN ANY OF THESE SUBJECTS. IF YES, DID YOU RECEIVE THIS TRAINING IN THE LAST 12 MONTHS?	YES IN 12 PRIOR months	YES IN 13-35 PRIOR months	NO	YES IN 12 PRIOR months	YES IN 13-35 PRIOR months	NO
Conducting test or reading results for:						
A) Laboratory diagnosis using HIV tests?……	1	2	3	1	2	3
B) Laboratory diagnosis using tuberculosis sputum test?……	1	2	3	1	2	3
C) Laboratory diagnosis using syphilis test?……	1	2	3	1	2	3
D) If yes (1 or 2) to 319A and/or 320A, please specify the type(s) of HIV test that the staff have been trained to use: Capillus, Bionor, Determine, Serocard, Hema-strip, Multispot/Ginne, Unigold, other (please specify)	LIST:			LIST:		

321 Please list all the HIV test kits that are managed by this facility: [IF NO TESTS MANAGED, WRITE "NONE"]	
Brand	Principal Usage 1=primary test, 2=secondary test, 3=confirmatory test

PART II: COMMODITY MANAGEMENT

YOU WILL WANT TO VISIT THE WAREHOUSE, STOREROOM OR STORAGE AREA WHERE THE HEALTH COMMODITIES LISTED BELOW ARE MANAGED AND ASK TO SPEAK WITH THE PERSON RESPONSIBLE FOR PHARMACEUTICALS.

HIV tests
1) Capillus-CC
2) Bionor-CC
3) Determine
4) Serocard-CC
5) Hema-strip
6) Multispot/Ginne-CC
7) Unigold

Contraceptives:
8) Microgynon oral pill
9) Male condom
10) Depo-Provera

Opportunistic infection drugs:
11) Fluconazole/Diflucan
12) Cotrimoxazole/Septrin
13) Aciclovir/Zovirax/Cyclovax

Malarial drugs:
14) Chloroquine
15) Sulphadoxine Pyrethamine (Fansidar)

STI drugs:
16) Ciprofloxacin/Cipro
17) Benzathine penicillan
18) Doxycycline
19) Metronidazole/Flagyl

ARVs:
20) Nevirapine
21) ddI/videx
22) d4t/stavudine
23) AZT/Zidovudine

TB medications:
24) Blister pack, 1st treatment
25) Ethambutol
26) Isoniazide
27) Rifampicin

Other commodities:
28) Disinfectant (JIK)
29) Unused sharps boxes
30) Plastic trash liners for wet waste
31) Clean gloves
32) Disposable pipettes/Disposable tips for pipettes

ASK TO TALK WITH THE STOCK MANAGER.
INTRODUCE ALL TEAM MEMBERS AND ASK FACILITY REPRESENTATIVES TO INTRODUCE THEMSELVES.

EXPLAIN THE OBJECTIVES OF THIS SURVEY:
As part of their on-going monitoring and evaluation of the Ministry of Health and USAID-supported programs, the MOH and its USAID partners are conducting a nationally representative survey for government and NGO facilities on logistic system performance and HIV/AIDS supported activities. We are visiting health facilities throughout the country and this facility was randomly selected to be included in the survey. The general objectives of the survey are as follows:

- Collect current information on logistics system performance and stock status of key health commodities, prior to the introduction of the new "pull" request and distribution system for the health commodities.
- Collect current information on the availability of HIV/AIDS prevention, care and support services, including other STIs, TB and other opportunistic infections, prior to the expansion of these services throughout the country.
- Collect information on the training of staff who manage and/or provide these services.

The results of this national survey will provide information to health planners and to organizations that work in these areas to promote improvements in system performance and the quality of services. This data will also be used to measure the changes in logistics system performance and in HIV/AIDS support services as a result of support to the Ministry of Health through the DELIVER project, the AIM project and other USAID projects.

We would like to ask you a few questions about the logistics procedures and the commodities and supplies available at this facility, and then we will be asking to see some of the places, or items that we have asked about. We would also like to interview some of the staff who provide the services we are asking about. Any information we collect today will be confidential and not identified with this facility. Do you have any questions?

400 Respondents interviewed at this site:

	Title	Length in current position	**Received training in logistics? (**If yes, specify product categories & dates**)
a)	_____	_____years/months	_____
b)	_____	_____years/months	_____
c)	_____	_____years/months	_____
d)	_____	_____years/months	_____
e)	_____	_____years/months	_____
f)	_____	_____years/months	_____
g)	_____	_____years/months	_____

***** Logistics includes the following functions: ordering, receiving supplies, inventory management, and supervision. If speaking to the person in charge of TB, ask specifically "Have you received formal training for TB drug logistics management?"***

401	Do you have the following logistics forms currently available to manage health products? IF "NOT AVAILABLE" TO BOTH A AND B, THEN SKIP TO QUESTION 409	OBSERVED	REPORTED AVAILABLE	NOT AVAILABLE
	A. Stock cards/records	1	2	3
	B LMIS form(s) (must include requisition and issue vouchers, tally sheets, etc.)	1	2	3

NO.	QUESTIONS	CODE CLASSIFICATION	GO TO
402	Do you use the following logistics forms to manage health products?		
	A. Stock cards/records	YES ……1 NO ……2	IF NO TO BOTH A AND B, THEN SKIP TO QUESTION 406
	B. LMIS form(s) (must include requisition and issue vouchers, tally sheets, etc.)	YES……1 NO ……2	
403	How is the information on these forms used? CIRCLE ALL THAT APPLY	Calculating consumption……A Calculating needs ……B Reporting use to the higher level……C Requesting supplies from the higher level……D Other, _____ W	
404	If LMIS forms are used, are reports sent to the higher level?	YES ……1 NO ……2 NOT APPLICABLE ……3 DON'T KNOW ……8	➔407 ➔407
405	How often are these transaction reports sent to the higher level?	Monthly ……A Quarterly ……B Semi-annually ……C Annually ……D Not Applicable ……E Other, _____ W	

NO.	QUESTIONS	CODE CLASSIFICATION	GO TO
406	How often are you supposed to send these reports to the higher level?	Monthly ……1 Quarterly ……2 Semi-annually ……3 Annually ……4 Not Applicable ……5 Other, _____ 6	
407	How many facilities should send reports to this facility?	If not applicable ……..NA ☐☐☐	IF ZERO ➔409
408	Provide an approximate number of facilities that send these reports according to schedule.	If not applicable ……..NA ☐☐☐	
409	How many times have you placed an order or submitted a procurement request in the last year?	0-3 times a year ……1 4-6 times a year ……2 more than 6 times a year ……3 None……4	
410	How often are you supposed to place orders or submit a procurement request? CIRCLE ALL THAT APPLY	Monthly ……A Quarterly ……B Semi-annually ……C Annually ……D Not Applicable ……E Other, _____….W	
411	Who determines this facility's re-supply quantities? CIRCLE ALL THAT APPLY	The facility itself (pull) ……A The facility at the higher level (push/topping up) .B Other, _____ W	
412	How are the facility's re-supply quantities determined?	Formula (DESCRIBE IN COMMENT SPACE) ….1 Higher level facility determines ……2 Other means, _____…8	
413	Which data elements are used to calculate the facility's re-supply quantities? CIRCLE ALL THAT APPLY	Beginning of reporting period stock level ……A End of reporting period stock level ……B Quantity received ……C Quantity dispensed ……D Losses and adjustments ……E Other, _____ W	
414	How did you learn how to complete the forms used at this facility? CIRCLE ALL THAT APPLY	During a logistics training ……A On the job training ……B On the job (self-learning)……C Other, _____ W	
415	Who is responsible for transporting commodities to your facility? CIRCLE ALL THAT APPLY	This facility collects ……A District level facility delivers ……B Sub-district level facility delivers ……C Supplier delivers ……D Other _____ W	
416	What mode of transportation is most often used? CIRCLE ALL THAT APPLY	Public transportation ……A Facility-managed vehicle ……B Private, hired vehicle ……C On foot ……D Other _____ W	
417	When did you conduct your last support supervisory visit?	Within the last month ……1 Within the last 3 months……2 Within the last 6 months ……3 Never ……4 Not Applicable ……5 Other _____ 6	

NO.	QUESTIONS	CODE CLASSIFICATION	GO TO
418	When did you receive your last support supervisory visit?	Within the last month ……1 Within the last 3 months ……2 Within the last 6 months ……3 Never ……4 Not Applicable ……5 Other _____ 6	 ➔421 ➔421
419	Who conducted the last support supervisory visit that you received? SPECIFY POSITION OF THE PERSON	_____	
420	What was done during the supervisory visit you received? (Circle all that apply)	Supplies checked ……A Stock cards checked ……B Expired stock removed ……C LMIS reports checked ……D On the job training/coaching ……E Other _____ W	

FIRST CHECK FOR THE COMMODITIES BELOW TO CHECK SIMPLY FOR PRESENCE OF AT LEAST ONE USABLE UNIT.

	SUPPLY ITEM	MINIMUM UNIT COUNT	OBSERVED	REPORTED AVAILABLE	NOT AVAILABLE
421	Disinfectant for cleaning surfaces (bleach or other cleaning solution)	Full bottle	1	2	3
422	Unused sharps boxes	One box	1	2	3
423	Plastic trash liners for wet waste	One full box	1	2	3
424	Clean exam gloves	One full box	1	2	3
425	Disposable pipettes/disposable tips for pipettes	One full box (of either one)	1	2	3

426. STOCK STATUS TABLE (December 2001 – May 2002)

- IN COLUMN 9, ENTER THE TOTAL AMOUNT OF EXPIRED QUANTITIES OF PRODUCTS THAT ARE ON THE SHELF OR ANYWHERE INSIDE THE STOREROOM FOR EACH PRODUCT.

Product	Units of Count	Product managed by this facility? Y/N	Total consumption or issues (Dec. 2001- May 2002)	Out of these 6 mos, no. of mos. of data available	Usable stock on hand		Has order been placed? Y/N	Expired products
					From physical inventory	From stock ledger or stock cards		
1	2	3	4	5	6	7	8	9
Capillus	Tests							
Bionor	Tests							
Determine	Tests							
Serocard	Tests							
Hema-strip	Tests							
Multispot	Tests							
Unigold	Tests							
Microgynon oral pill	Cycle							
Male condom	Piece							
Depo-Provera	Vial							
Fluconazole/ Diflucan	150mg cap							
Cotrimoxazole/ Septrin	400/80 mg tab							
Aciclovir/Zovirax/ Cyclovax	200mg tab							
Chloroquine	Adult tab							
Sulphadox. Pyrethamine/ Fansidar	500 mg/25 mg tab							

Ciprofloxacin/Cipro	500 mg tab							
Benzathine penicillan	2.4 mU powder							
Doxycycline	100 mg tab							
Metronidazole/ Flagyl	200 mg tab							
Nevirapine	200 mg tab							
Nevirapine	50mg/ mL (240ml) Syrup							
DdI/virex	25mg/ 100mg tab							
d4t/ stavudine	40mg cap							
AZT/zidovudine	300mg cap							
Blister pack: 1st TB treatmt	Pack							
Ethambutol	400 mg tab							
Isoniazide	100mg tab							
Rifampicin	150 mg tab							

427. STOCKOUT ASSESSMENT TABLE (December 2001 – May 2002)

REVIEW THE STOCK CARDS FROM DECEMBER 2001 TO MAY 2002 TO IDENTIFY IF ANY PRODUCTS STOCKED OUT. ALTERNATIVELY, ASK KNOWLEDGEABLE STAFF TO IDENTIFY IF ANY PRODUCTS HAVE STOCKED OUT DURING THIS PERIOD.

FOR ALL PRODUCTS THAT ARE BOTH CHECKED AS PRODUCTS MANAGED BY THIS FACILITY AND HAD A STOCKOUT BETWEEN DECEMBER 2001 AND MAY 2002, COMPLETE THE FOLLOWING TABLE. IF THE STOCKOUT BEGAN PRIOR TO DECEMBER 1, 2001 AND CONTINUED INTO THIS 6 MONTH PERIOD, ENTER DEC. 1, 2001 AS STOCKOUT START DATE.

♦**Note*: It may be necessary to use more than one line per product in the table as, for example, there may have been 3 different stockouts of Depo-Provera during this time period.***

ENTER THE MAIN REASON FOR THE STOCKOUT. PLEASE USE THE FOLLOWING CODES:

Reason for stockout:

1= Higher level facility did not send enough products
2= Higher level facility did not send products in time
3= Increase in consumption
4= Did not request the correct amount
5= Did not request products at the correct time
6= Insufficient resources (financial, human or transportation, specify
7=Other reasons and state the reason in column 9

Authorized Products	Stock card available (Y/N)	Stock card updated (Y/N)	Stockout at time of visit? (Y/N)	Stockout start date	Stockout end date	Source of information		Reason for stockout (see list above)
						stock cards or other records	Informants knowledge	
1	2	3	4	5	6	7	8	9

428. PERCENT DIFFERENCE BETWEEN QUANTITY ORDERED AND QUANTITY RECEIVED:
IF THIS FACILITY DOES NOT MANAGE ONE OF THE SELECTED PRODUCTS, LEAVE THAT ROW BLANK. SEE TABLE 427, COLUMN 3 TO VERIFY WHICH OF THE 10 PRODUCTS THE FACILITY MANAGES.

Method/Brand/ Product	Units	Quantity ordered in last filled order	Date last filled order placed	Quantity received in last filled order/ procurement	Date last filled order received	Comments:
1	2	3	4	5	6	7
Determine test	Test					
Male condom	Piece					
Depo-Provera	Vial					
Cotrimoxazole/ Septrin	400/80 mg tab					
Chloroquine	Adult tab					
Sulphadox. Pyrethamine/ Fansidar	500 mg/25 mg tab					
Benzathine penicillan	2.4 mU powder					
Doxycycline	100 mg tab					
Rifampicin	150 mg tab					

429. STORAGE CONDITIONS TABLE

ITEMS 1-13 SHOULD BE ASSESSED FOR ALL FACILITIES FOR PRODUCTS THAT ARE READY TO BE ISSUED OR DISTRIBUTED TO CLIENTS. A TABLE SHOULD BE FILLED OUT FOR EACH STORAGE AREA HOUSING ONLY THE PRODUCTCATEGORIES LISTED BELOW. PLEASE SPECIFY THE TYPES OF PRODUCTS BEING ASSESSED IN THE STORAGE AREA BY CIRCLING THE CATEGORY (IES) OF PRODUCTS BELOW. PLACE A CHECK MARK IN THE APPROPRIATE COLUMN BASED ON VISUAL INSPECTION OF THE STORAGE FACILITY, NOTING ANY RELEVANT OBSERVATIONS IN THE COMMENTS COLUMN***. TO QUALIFY AS "YES," ALL PRODUCTS AND CARTONS MUST MEET THE CRITERIA FOR EACH ITEM***.

Contraceptives Opportunistic Infection Drugs Malarial Drugs STI Drugs TB Medications

No	Description	Yes	No	N/A	Comments
1.	Products that are ready for distribution are arranged so that identification labels and expiry dates and/or manufacturing dates are visible.				
2.	Products are stored and organized in a manner accessible for First-Expiry / First-Out (FEFO) counting and general management.				
3.	Cartons and products are in good condition, not crushed due to mishandling. If cartons are open, check if products are not wet or cracked due to heat/radiation (fluorescent lights in the case of condoms)				
4.	The facility makes it a practice to separate damaged and/or expired products from good products and remove them from inventory.				
5.	Products are protected from direct sunlight at all times of the day and during all seasons.				
6.	Cartons and products are protected from water and humidity during all seasons.				
7.	Storage area is visually free from harmful insects and rodents. (Check the storage area for traces of rodents (droppings) or insects).				
8.	Storage area is secured with a lock and key, but accessible during normal working hours, with access limited to authorized personnel.				
9.	Products are stored at the appropriate temperature during all seasons according to product temperature specifications.				
10.	All hazardous waste (e.g., needles, toxic materials) is properly disposed of and non-accessible to non-medical personnel.				
11.	Roof is maintained in good condition to avoid sunlight and water penetration at all times.				
12.	Storeroom is maintained in good condition (e.g. clean, all trash removed, shelves are sturdy, boxes are organized).				
13.	The current space and organization is sufficient for existing products and reasonable expansion (i.e., receipt of expected product deliveries for the foreseeable future).				

The additional standards below can be applied to any facility large enough to require stacking of multiple boxes.

No.	Description	Yes	No	N/A	Comments
14.	Products are stacked at least 10 cm off the floor.				
15.	Products are stacked at least 30 cm away from the walls and other stacks.				
16.	Products are stacked no more than 2.5 meters high.				
17.	Fire safety equipment is available and accessible (any item identified as being used to promote fire safety should be considered).				
18.	Products are stored separately from insecticides and chemicals.				

Additional guidelines for specific questions:

Item 2: In noting proper product arrangement, the shelf life of the different products should be considered.

Item 3: Cartons should be checked to determine whether they are smashed due to mishandling. The conditions of the products inside opened or damaged cartons should also be examined to see if they are wet, cracked open due to heat/radiation (e.g. because of fluorescent lights in the case of condoms) or crushed.

Item 4: The discarding of damaged or expired products should be conducted according to the facility's procedures (which may differ from one facility to another). Please specify if procedures exist and note what they are.

Item 7: It is important to check the storage area for traces of rodents (droppings) or insects harmful to the products.

Item 8: This refers to either a warehouse secured with a lock or to a cabinet with a key in a clinic.

Item 17: Fire safety equipment does not have to meet international standards. Any item identified as being used to promote fire safety (e.g. water bucket, sand) should be considered.

430	If this facility has any supply problems, what could be done to ensure the regular supply of products?	1. _____ 2. _____ 3. _____
431	Aside from “more staff” and “salary issues”, what kind of support could be provided to help you do your job more effectively?	1. _____ 2. _____ 3. _____
Ask the person/people you interviewed if they have any questions for you.		

COMMENTS OR GENERAL OBSERVATIONS ON COMMODITIES MANAGEMENT:

Thank the person/people who talked with you. Reiterate how they have helped the program achieve it’s objectives and assure them that the results will be used to develop improvements in logistics system performance

432. End time of interview: _____ 433. Total time of interview: _____

434.Total provider interviews completed at this facility	PROVIDER INTERVIEWS..... ☐☐

NOTES/COMMENTS

Provider Interview

FACILITY IDENTIFICATION

Name of the facility_____	
Facility Location_____	
District _____	DISTRICT..... ☐☐
Sub-district _____	SUB-DISTRICT ☐☐
Code of the facility	FACILITY CODE..... ☐☐
Type of Health Facility : (1 = Referral hospital; 2 = Hospital; 3= Health center IV; 4 = Health center III, 5 = Health center II 6 = Other _____).....	FACILITY TYPE..... ☐
Operating Authority: 1= Government; 2 = Non-governmental organization 6= Other _____).....	OPERATING AUTHORITY ..... ☐

INFORMATION ABOUT INTERVIEW

Date:_____	DAY..... ☐☐
	MONTH..... ☐☐
	YEAR ..... ☐☐☐☐
Name of the interviewer_____	INTERVIEWER CODE.. ☐☐
Time interview started:	HOUR..... ☐☐
	MINUTES..... ☐☐

Provider Interview

100 **OBSERVER:** INTRODUCE YOURSELF TO THE PROVIDER.

Hello. We are here to conduct a national survey on behalf of the Ministry of Health and two projects funded by USAID that work with the Ministry of Health. As part of their on-going monitoring and evaluation of the Ministry of Health and USAID-supported programs, the MOH and its USAID partners are conducting a nationally representative survey of government and non-governmental facilities on logistic system performance, health commodity availability, the availability of HIV/AIDS services and information on the training of staff who manage these services. We are visiting health facilities throughout the country and this facility was randomly selected to be included in the survey. The results of this national survey will provide information to health planners and to organizations that work in these areas to promote improvements in system performance and the quality of services. I would like to ask you some questions about this subject.

This information is completely confidential. Do you have any questions for me at this time? Do I have your agreement to participate?

_____ _____

INTERVIEWER'S SIGNATURE (Indicates respondent's willingness to participate)

DATE

NO.	QUESTIONS	CODING CLASSIFICATION	GO TO
	1. Provider Training and Experience		
100a	May I continue?	YES.....1 NO.....2	➔STOP
101	INDICATE THE SEX OF THE PROVIDER	MALE.....1 FEMALE.....2	
102	What is your highest technical qualification?	MEDICAL DOCTOR.....10 CLINICAL OFFICER.....20 NURSE.....30 NURSING ASSISTANT.....31 MIDWIFE.....40 SOCIAL WORKER.....50 HEALTH ASSISTANT.....60 OTHER_____.96	
103	Do you <u>currently personally</u> provide any services or treatment related to HIV/AIDS? This includes social support services. If you provide the service only occasionally, this is still considered "YES".	YES.....1 NO.....2	➔106
104	I am going to ask you about specific HIV/AIDS related services. Do you currently personally provide any of these services or refer clients for these services?		

	YES	NO
a) VCT	1	2
b)Social support post-test services	1	2
c) PMTCT	1	2
d) Opportunistic infections:	1	2
e) Home-based care	1	2
f) Orphans/vulnerable children	1	2
g) Youth friendly programs	1	2

	IN-SERVICE TRAINING		
NO.	**QUESTIONS**	**CODING CLASSIFICATION**	
	Have you received any in-service training in the last three years in the services mentioned below? IF YES, Did you receive this training in the last 12 months?	YES PRIOR 12mo / YES PRIOR 13-35mo / NO	
105	A) Counseling for prevention of HIV/AIDS? B) Voluntary Counseling and Testing C) Mother to Child transmission? D) Prevention and treatment of opportunistic infections? E) Anti-retroviral therapy for HIV/AIDS infected clients? F) Counseling/social support for HIV/AIDS infected clients? W) Other_____? (SPECIFY)	PREVENTION HIV/AIDS. 1 2 3 VCT..... 1 2 3 MOTHER TO CHILD TRANSMISSION ..... 1 2 3 OPPORTUNISTIC INFECTIONS..... 1 2 3 ANTI-RETROVIRAL TX.. 1 2 3 COUNSEL/SUPPORT HIV/AIDS ..... 1 2 3 OTHER_____ 1 2 3	
106	Do you currently personally provide either the service, or treatment for clients who have STIs? If you provide the service only occasionally, this is still considered "YES".	YES..... 1 NO 2	➔108
	Have you received any in-service training in the last three years in the following subjects? IF YES, Did you receive this training in the last 12 months?	YES PRIOR 12mo / YES PRIOR 13-35mo / NO	
107	A) Counseling for prevention of STIs? B) Etiological (laboratory confirmed) diagnosis and treatment of STIs? C) Syndromic diagnosis and treatment of STIs?	STI COUNSELING/ PREVENTION ..... 1 2 3 ETIOLOGICAL DX & TX.. 1 2 3 SYNDROMIC DX & TX.... 1 2 3	
108	Do you currently personally provide services for clients who have tuberculosis? If you provide the service only occasionally, this is still considered "YES".	YES..... 1 NO 2	➔110
	Have you received any in-service training in the last three years in the following areas? IF YES, Did you receive this training in the last 12 months?	YES PRIOR 12mo / YES PRIOR 13-35mo / NO	
109	A) Diagnosis and treatment of tuberculosis B) DOTS program	TUBERCULOSIS 1 2 3 DOTS 1 2 3	

Supervision

NO	QUESTIONS	CODING CLASSIFICATION	GO TO
110	In the last six months have you had a supervisor from outside the facility speak with you about your work or observe your work? [IN LARGE FACILTIES THIS MAY BE EXTERNAL TO THE SERVICE UNIT]	YES..... 1 NO..... 2	➔112
111	How many times in the last six months has your work been supervised?	NO OF TIMES..... ☐☐	

112	RECORD TIME INTERVIEW ENDED.	HOUR ..... ☐☐ MINUTES..... ☐☐	
113	INTERVIEWER COMMENTS		

Appendix G

Full Tabulation of Data

Table G.1 Management of HIV test kits

Percentage of facilities that reported managing various HIV test kits, by ownership and facility type, UHFS 2002

Ownership and facility type	Capillus	Bionor	Determine	Serocard	Hema-strip	Multispot/ Ginne	Number of facilities
Ownership							
Government	4.0	3.7	2.9	3.8	0.1	1.1	183
Non-government	21.0	0.9	8.2	14.9	0.4	3.1	55
Facility type							
District hospital	28.0	19.1	20.0	28.0	0.0	24.1	8
HC IV	53.1	22.9	27.5	43.6	0.9	7.6	25
HC III	1.4	0.0	1.2	0.3	0.2	0.0	117
HC II	2.1	0.0	0.0	2.1	0.0	0.0	76
District warehouse	0.0	0.0	0.0	0.0	0.0	0.0	12
Government facilities							
District hospital	28.0	19.1	20.0	28.0	0.0	24.1	8
HC IV	29.8	32.8	23.6	27.4	1.3	1.3	16
HC III	0.3	0.0	0.0	0.3	0.0	0.0	86
HC II	0.0	0.0	0.0	0.0	0.0	0.0	61
District warehouse	0.0	0.0	0.0	0.0	0.0	0.0	12
Non-government facilities							
HC IV	94.6	5.4	34.5	72.5	0.0	18.7	9
HC III	4.5	0.0	4.5	0.0	0.7	0.0	31
HC II	10.2	0.0	0.0	10.2	0.0	0.0	15
Total	7.9	3.1	4.2	6.4	0.2	1.6	238

Table G.2 Management of contraceptives

Percentage of facilities that reported managing various contraceptives (Microgynon oral pills, condoms, and Depo-Provera), by ownership and facility type, UHFS 2002

Ownership and facility type	Microgynon oral pill	Male condom	Depo-Provera	Number of facilities
Ownership				
Government	72.7	98.0	87.9	183
Non-government	41.4	61.5	63.4	55
Facility type				
District hospital	60.1	97.2	60.1	8
HC IV	69.9	91.2	82.4	25
HC III	69.8	89.0	87.5	117
HC II	52.4	87.4	74.1	76
District warehouse	100.0	100.0	96.3	12
Government facilities				
District hospital	60.1	97.2	60.1	8
HC IV	74.5	100.0	98.7	16
HC III	78.5	96.8	91.3	86
HC II	60.1	98.8	82.1	61
District warehouse	100.0	100.0	96.3	12
Non-government facilities				
HC IV	61.5	75.5	53.3	9
HC III	45.2	66.9	77.0	31
HC II	21.6	42.0	42.0	15
Total	65.5	89.5	82.2	238

Table G.3 Management of drugs to treat opportunistic infections

Percentage of facilities that reported managing various drugs to treat opportunistic infections (fluconazole, co-trimoxazole, and acyclovir), by ownership and facility type, UHFS 2002

Ownership and facility type	Fluconazole/ Diflucan	Co-trimoxazole/ Septrim	Acyclovir/ Zovirax/ Cyclovax	Number of facilities
Ownership				
Government	6.9	94.2	1.7	183
Non-government	17.8	96.9	18.8	55
Facility type				
District hospital	67.1	80.0	19.1	8
HC IV	32.1	100.0	21.1	25
HC III	2.9	97.3	4.1	117
HC II	3.8	93.3	1.8	76
District warehouse	24.1	79.6	3.7	12
Government facilities				
District hospital	67.1	80.0	19.1	8
HC IV	7.6	100.0	5.7	16
HC III	0.6	96.5	0.3	86
HC II	4.7	94.1	0.0	61
District warehouse	24.1	79.6	3.7	12
Non-government facilities				
HC IV	75.8	100.0	48.4	9
HC III	9.3	99.3	14.8	31
HC II	0.0	90.2	9.1	15
Total	9.4	94.8	5.6	238

Table G.4 Management of malarial drugs

Percentage of facilities that reported managing various malarial drugs (chloroquine and sulphadoxine pyrimethamine), by ownership and facility type, UHFS 2002

Ownership and facility type	Chloroquine	Sulphadoxine pyrimethamine (Fansidar)	Number of facilities
Ownership			
Government	98.3	94.9	183
Non-government	96.9	91.1	55
Facility type			
District hospital	100.0	100.0	8
HC IV	100.0	100.0	25
HC III	98.5	94.3	117
HC II	97.1	93.3	76
District warehouse	92.6	79.6	12
Government facilities			
District hospital	100.0	100.0	8
HC IV	100.0	100.0	16
HC III	98.3	96.2	86
HC II	98.8	94.1	61
District warehouse	92.6	79.6	12
Non-government facilities			
HC IV	100.0	100.0	9
HC III	99.3	89.0	31
HC II	90.2	90.2	15
Total	98.0	94.0	238

Table G.5 Management of STI drugs

Percentage of facilities that reported managing various STI drugs (ciprofloxacin, benzathine penicillin, doxycycline, and metronidazole), by ownership and facility type, UHFS 2002

Ownership and facility type	Ciprofloxacin/ Cipro	Benzathine penicillin	Doxycycline	Metronidazole/ Flagyl	Number of facilities
Ownership					
Government	61.2	84.1	64.5	96.1	183
Non-government	70.0	92.5	73.2	91.5	55
Facility type					
District hospital	79.4	80.7	42.9	100.0	8
HC IV	92.9	96.2	94.7	93.3	25
HC III	68.1	90.2	70.4	96.9	117
HC II	46.4	77.8	56.2	94.6	76
District warehouse	50.0	79.6	50.0	79.6	12
Government facilities					
District hospital	79.4	80.7	42.9	100.0	8
HC IV	90.3	94.0	91.7	100.0	16
HC III	68.7	88.1	70.1	95.8	86
HC II	42.7	77.1	55.0	98.1	61
District warehouse	50.0	79.6	50.0	79.6	12
Non-government facilities					
HC IV	97.6	100.0	100.0	81.3	9
HC III	66.3	96.3	71.2	100.0	31
HC II	61.0	80.4	61.0	80.4	15
Total	63.3	86.0	66.5	95.0	238

Table G.6 Management of TB drugs

Percentage of facilities that reported managing various TB drugs (blister pack, ethambutol, isoniazid, and rifampin), by ownership and facility type, UHFS 2002

Ownership and facility type	Blister pack, 1st treatment	Ethambutol	Isoniazid	Rifampin	Number of facilities
Ownership					
Government	39.3	29.8	20.1	21.4	183
Non-government	21.4	20.2	16.1	13.4	55
Facility type					
District hospital	65.0	60.1	23.0	36.9	8
HC IV	90.6	81.9	67.6	59.9	25
HC III	33.8	23.8	17.3	16.8	117
HC II	5.4	1.1	1.1	1.1	76
District warehouse	100.0	96.3	46.3	66.7	12
Government facilities					
District hospital	65.0	60.1	23.0	36.9	8
HC IV	94.5	80.9	72.4	67.5	16
HC III	41.1	28.5	19.7	19.4	86
HC II	6.7	0.9	0.9	0.9	61
District warehouse	100.0	96.3	46.3	66.7	12
Non-government facilities					
HC IV	83.7	83.7	59.1	46.3	9
HC III	13.4	10.3	10.3	9.3	31
HC II	0.0	2.0	2.0	2.0	15
Total	35.2	27.6	19.1	19.6	238

Table G.7 Stockouts over the six-month period

Percentage of facilities that experienced at least one stockout of various commodities between December 1, 2001 and May 31, 2002, by ownership and facility type, UHFS 2002

Ownership and facility type	Microgynon oral pill	Male condom	Depo-Provera	Fluconazole	Co-trimoxazole	Acyclovir	Chloroquine	Sulphadoxine pyrethamine	Ciprofloxacin	Benzathine penicillin	Doxycycline	Metronidazole	TB blister pack	Ethambutol	Isoniazid	Rifampin
Ownership																
Government	33.0	17.5	25.4	94.2	55.3	98.3	28.6	44.6	61.6	45.6	61.4	52.2	49.7	58.8	72.0	73.5
Non-government	49.3	27.9	24.5	83.9	9.5	77.3	2.4	19.1	36.3	8.8	35.0	8.1	73.9	72.3	77.9	81.6
Facility type																
District hospital	59.0	2.8	39.9	37.7	41.0	80.9	20.0	28.7	77.0	49.3	78.1	37.1	56.7	39.9	77.0	63.1
HC IV	31.0	31.0	34.1	74.0	55.3	86.6	12.2	45.4	48.5	37.4	37.1	66.0	23.3	18.1	45.3	53.1
HC III	37.8	17.6	19.9	99.7	42.9	96.1	23.4	41.5	52.1	29.4	58.6	35.9	67.9	79.0	83.4	85.2
HC II	36.3	19.0	29.9	100.0	42.9	0.0	22.4	32.8	59.9	47.0	47.0	47.7	0.0	0.0	0.0	0.0
District warehouse	20.4	29.6	26.9	53.8	53.5	0.0	42.0	37.2	85.2	53.5	85.2	20.9	20.4	7.7	0.0	25.0
Government facilities																
District hospital	59.0	2.8	39.9	37.7	41.0	80.9	20.0	28.7	77.0	49.3	78.1	37.1	56.7	39.9	77.0	63.1
HC IV	26.8	31.4	27.1	98.7	74.1	100.0	19.0	55.3	52.9	55.2	45.7	80.3	20.7	19.1	47.8	52.7
HC III	30.8	12.1	18.8	99.7	54.6	100.0	30.2	49.0	56.1	38.5	63.6	48.0	60.9	75.2	81.2	83.2
HC II	39.5	21.0	33.7	100.0	53.3	*	27.6	38.1	75.4	53.1	55.4	57.5	0.0	0.0	0.0	0.0
District warehouse	20.4	29.6	26.9	53.8	53.5	0.0	42.0	37.2	85.2	53.5	85.2	20.9	20.4	7.7	0.0	25.0
Non-government facilities																
HC IV	38.5	30.2	46.7	30.0	21.8	62.7	0.0	27.6	40.6	5.8	21.8	40.5	27.9	16.3	40.9	53.7
HC III	57.8	33.1	23.0	100.0	10.0	85.2	4.1	20.4	41.0	3.7	44.5	1.6	87.6	89.7	89.7	90.7
HC II	0.0	0.0	0.0	*	0.0	0.0	0.0	10.8	16.7	24.0	16.7	0.0	*	0.0	0.0	0.0
Total	36.5	19.6	25.2	91.6	44.6	92.6	22.6	38.7	55.1	36.8	54.9	42.3	55.5	62.2	73.5	75.5

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.8 Stockout on day of survey: HIV test kits

Among facilities that reported managing various HIV test kits, percentage that had stockouts of the kits on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Capillus	Bionor	Determine	Serocard	Multispot/Ginne
Ownership					
Government	*	14.7	12.8	*	100.0
Non-government	51.8	*	0.0	100.0	*
Facility type					
District hospital	*	*	*	*	100.0
HC IV	100.0	14.7	10.0	100.0	100.0
Government facilities					
District hospital	*	*	*	*	100.0
HC IV	*	14.7	12.8	*	100.0
Non-government facilities					
HC IV	100.0	*	0.0	100.0	*
Number of facilities	51.8	14.7	7.8	100.0	100.0

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.9 Stockout on day of survey: contraceptives

Among facilities that reported managing various contraceptives, percentage that had stockouts of the contraceptives on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Microgynon oral pill	Male condom	Depo-Provera
Ownership			
Government	34.1	22.7	34.6
Non-government	15.4	8.5	8.5
Facility type			
District hospital	19.1	0.0	38.4
HC IV	11.6	5.9	33.9
HC III	20.3	10.0	16.3
HC II	83.9	70.6	54.3
District warehouse	92.6	87.5	100.0
Government facilities			
District hospital	19.1	0.0	38.4
HC IV	8.9	0.0	43.8
HC III	23.6	12.9	21.4
HC II	82.9	68.9	51.7
District warehouse	92.6	87.5	100.0
Non-government facilities			
HC IV	16.3	16.3	16.3
HC III	11.0	1.7	1.7
HC II	100.0	100.0	100.0
Number of facilities	29.8	19.5	28.8

Table G.10 Stockout on day of survey: Drugs to treat opportunistic infections

Among facilities that reported managing various drugs to treat opportunistic infections, percentage that had stockouts of the drugs on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Fluconazole	Co-trimoxazole	Acyclovir
Ownership			
Government	8.5	35.4	2.8
Non-government	8.5	9.5	2.6
Facility type			
District hospital	38.4	16.1	19.1
HC IV	6.1	23.5	7.8
HC III	2.9	22.8	0.2
HC II	100.0	47.4	*
District warehouse	100.0	93.3	100.0
Government facilities			
District hospital	38.4	16.1	19.1
HC IV	6.2	27.5	5.7
HC III	0.6	29.8	0.3
HC II	100.0	45.3	*
District warehouse	100.0	93.3	100.0
Non-government facilities			
HC IV	5.8	16.3	11.5
HC III	9.3	3.1	0.0
HC II	*	100.0	*
Number of facilities	8.5	29.9	2.7

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.11 Stockout on day of survey: Malarial drugs

Among facilities that reported managing malarial drugs, percentage that had stockouts of the drugs on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Chloroquine	Sulphadoxine pyrethamine
Ownership		
Government	18.4	35.7
Non-government	6.7	30.8
Facility type		
District hospital	0.0	3.9
HC IV	3.8	29.8
HC III	9.1	25.9
HC II	40.6	71.9
District warehouse	80.0	60.9
Government facilities		
District hospital	0.0	3.9
HC IV	5.9	23.6
HC III	12.3	27.6
HC II	34.0	69.2
District warehouse	80.0	60.9
Non-government facilities		
HC IV	0.0	40.9
HC III	0.0	21.1
HC II	100.0	100.0
Number of facilities	15.8	34.6

Table G.12 Stockout on day of survey: STI drugs

Among facilities that reported managing various STI drugs, percentage that had stockouts of the drugs on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Ciprofloxacin	Benzathine penicillin	Doxycycline	Metronidazole
Ownership				
Government	66.5	53.5	58.6	33.2
Non-government	22.8	20.6	34.2	10.2
Facility type				
District hospital	50.6	31.5	31.4	16.1
HC IV	55.9	29.0	26.3	32.8
HC III	47.1	36.0	46.9	19.6
HC II	94.7	82.4	95.1	43.7
District warehouse	64.0	93.3	92.0	93.3
Government facilities				
District hospital	50.6	31.5	31.4	16.1
HC IV	75.1	42.0	38.1	39.0
HC III	58.4	43.8	51.9	25.6
HC II	94.1	83.5	94.3	41.3
District warehouse	64.0	93.3	92.0	93.3
Non-government facilities				
HC IV	21.8	5.8	5.4	21.7
HC III	15.4	14.2	33.1	2.4
HC II	100.0	76.6	100.0	100.0
Number of facilities	56.3	45.7	52.8	28.3

Table G.13 Stockout on day of survey: TB drugs

Among facilities that reported managing various TB drugs, percentage that had stockouts of the drugs on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Blister pack, 1st treatment	Ethambutol	Isoniazid	Rifampin
Ownership				
Government	10.4	10.5	12.7	24.7
Non-government	8.8	5.0	3.8	3.8
Facility type				
District hospital	19.3	0.0	0.0	36.9
HC IV	18.8	11.6	28.1	42.2
HC III	7.7	9.2	4.6	8.4
District warehouse	0.0	0.0	100.0	100.0
Government facilities				
District hospital	19.3	0.0	0.0	36.9
HC IV	7.7	5.9	34.6	56.6
HC III	10.4	12.5	6.2	11.4
District warehouse	0.0	0.0	100.0	100.0
Non-government facilities				
HC IV	38.5	21.8	16.4	16.4
Number of facilities	10.0	9.1	10.4	19.4

Table G.14 Stock on hand: HIV test kits

Average number of months of stock on hand of various HIV test kits that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Capillus	Bionor	Determine	Serocard	Multispot/ Ginne
Ownership					
Government	3.4	1.8	8.3	4.8	100.0
Non-government	8.2	*	5.4	3.8	*
Facility type					
District hospital	2.0	*	*	8.7	100.0
HC IV	7.2	1.8	6.9	3.2	*
HC III	2.9	*	*	*	*
Government facilities					
District hospital	2.0	*	*	8.7	100.0
HC IV	4.1	1.8	8.3	2.8	*
Non-government facilities					
HC IV	9.3	*	5.4	3.8	*
HC III	2.9	*	*	*	*
Total	6.0	1.8	6.9	4.5	100.0

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.15 Stock on hand: Contraceptives

Average number of months of stock on hand of various contraceptives that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Microgynon oral pill	Male condom	Depo-Provera
Ownership			
Government	3858.7	40.6	6.8
Non-government	57.3	27.0	1.7
Facility type			
District hospital	11.6	39.7	0.7
HC IV	44.7	34.0	2.1
HC III	12.2	47.2	3.7
HC II	15807.9	34.3	14.4
District warehouse	39.5	3.2	1.5
Government facilities			
District hospital	11.6	39.7	0.7
HC IV	27.6	34.4	1.8
HC III	10.3	51.3	4.1
HC II	15807.9	35.2	15.1
District warehouse	39.5	3.2	1.5
Non-government facilities			
HC IV	84.6	32.3	3.8
HC III	27.9	26.9	1.2
HC II	*	15.8	1.0
Total	3480.3	39.0	6.2

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.16 Stock on hand: Drugs to treat opportunistic infections

Average number of months of stock on hand of various drugs for treating opportunistic infections that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Fluconazole/ Diflucan	Co-trimoxazole/ Septrim	Acyclovir/ Zovirax/ Cyclovax
Ownership			
Government	1.1	1.3	*
Non-government	0.9	6.2	2.8
Facility type			
District hospital	1.1	0.3	*
HC IV	0.8	1.8	3.1
HC III	*	2.5	0.2
HC II	*	1.8	4.5
District warehouse	*	0.8	*
Government facilities			
District hospital	1.1	0.3	*
HC IV	0.0	0.8	*
HC III	*	1.2	*
HC II	*	1.7	*
District warehouse	*	0.8	*
Non-government facilities			
HC IV	0.9	3.7	3.1
HC III	*	9.0	0.2
HC II	*	2.7	4.5
Total	1.0	2.1	2.8

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.17 Stock on hand: Malarial drugs

Average number of months of stock on hand of malarial drugs that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Chloroquine	Sulphadoxine pyrethamine/ Fansidar
Ownership		
Government	4.1	2.1
Non-government	9.8	10.5
Facility type		
District hospital	0.9	0.5
HC IV	8.8	2.8
HC III	4.2	3.7
HC II	5.4	4.5
District warehouse	4.1	1.3
Government facilities		
District hospital	0.9	0.5
HC IV	3.1	1.4
HC III	3.6	1.5
HC II	5.7	4.3
District warehouse	4.1	1.3
Non-government facilities		
HC IV	17.5	5.9
HC III	7.6	16.6
HC II	3.5	5.3
Total	5.0	3.5

Table G.18 Stock on hand: STI drugs

Average number of months of stock on hand of various STI drugs that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Ciprofloxacin/ Cipro	Benzathine penicillin	Doxycycline	Metronidazole/ Flagyl
Ownership				
Government	0.9	3.2	2.0	1.3
Non-government	5.0	4.4	5.2	3.2
Facility type				
District hospital	0.5	1.0	2.1	0.7
HC IV	1.2	3.6	2.4	0.9
HC III	5.1	4.6	1.7	1.8
HC II	5.2	2.3	6.8	1.9
District warehouse	0.5	1.1	0.0	0.8
Government facilities				
District hospital	0.5	1.0	2.1	0.7
HC IV	1.0	3.7	1.2	0.8
HC III	0.7	4.3	1.0	1.3
HC II	3.2	2.1	4.9	1.6
District warehouse	0.5	1.1	0.0	0.8
Non-government facilities				
HC IV	1.4	3.6	3.7	1.1
HC III	7.6	5.3	3.6	4.6
HC II	5.7	3.5	10.9	3.4
Total	3.1	3.5	3.0	1.6

Table G.19 Stock on hand: TB drugs

Average number of months of stock on hand of various TB drugs that are ready to be distributed to clients, by ownership and facility type, UHFS 2002

Ownership and facility type	Blister pack, 1st treatment	Ethambutol	Isoniazid	Rifampin
Ownership				
Government	4.1	10.1	18.1	2.6
Non-government	54.8	49.7	26.0	1.5
Facility type				
District hospital	0.5	4.5	5.8	*
HC IV	19.8	49.2	60.7	0.5
HC III	7.7	9.2	16.1	3.0
HC II	4.2	3.0	4.5	0.4
District warehouse	1.3	11.3	*	0.6
Government facilities				
District hospital	0.5	4.5	5.8	*
HC IV	4.2	9.6	4.7	*
HC III	7.7	11.6	27.2	3.6
HC II	4.2	3.0	4.5	0.4
District warehouse	1.3	11.3	*	0.6
Non-government facilities				
HC IV	54.8	76.4	72.0	0.5
HC III	*	2.0	2.0	2.0
Total	8.8	19.9	21.3	2.2

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.20 Reported use of stock cards

Percentage of facilities that had stock cards available on the day of the survey and reported using them for stock management, by ownership and facility type, UHFS 2002

Ownership and facility type	Stock cards available and used for stock management	Number of facilities
Ownership		
Government	84.2	183
Non-government	62.2	55
Facility type		
District hospital	100.0	8
HC IV	100.0	25
HC III	77.4	117
HC II	71.5	76
District warehouse	87.0	12
Government facilities		
District hospital	100.0	8
HC IV	100.0	16
HC III	87.7	86
HC II	72.6	61
District warehouse	87.0	12
Non-government facilities		
HC IV	100.0	9
HC III	48.4	31
HC II	67.3	15
Total	79.2	238

Table G.21 Actual use of stock cards

Percentage of facilities that were actually using stock cards to manage their health commodities on the day of the visit by commodity category, ownership and facility type, UHFS 2002

Ownership and facility type	Stock cards used to manage contraceptives	Number of facilities that manage contraceptives	Stock cards used to manage OI/malaria/STI drugs	Number of facilities that manage OI/malaria/STI drugs	Stock cards used to manage TB drugs	Number of facilities that manage TB drugs
Ownership						
Government	49.4	181.0	77.1	180.0	31.7	124
Non-government	29.9	46.0	67.1	53.0	14.3	40
Facility type						
District hospital	93.3	8.0	100.0	8.0	65.0	8
HC IV	65.6	25.0	90.4	25.0	55.6	25
HC III	39.2	116.0	75.8	116.0	11.8	114
HC II	37.7	66.0	67.5	74.0	47.6	4
District warehouse	74.1	12.0	59.6	12.0	87.0	12
Government facilities						
District hospital	93.3	8.0	100.0	8.0	65.0	8
HC IV	77.0	16.0	85.0	16.0	52.0	16
HC III	43.8	85.0	81.9	85.0	16.0	84
HC II	39.1	60.0	68.4	60.0	51.1	4
District warehouse	74.1	12.0	59.6	12.0	87.0	12
Non-government facilities						
HC IV	45.2	9.0	100.0	9.0	61.9	9
HC III	26.5	31.0	59.0	31.0	0.0	30
HC II	24.3	6.0	63.3	14.0	0.0	0
Total	45.4	227.0	74.8	234.0	27.5	164

Table G.22 Data quality

Among facilities that manage contraceptives and essential drugs used to treat OIs, malaria, STIs, and TB and that have stock cards available, median percent discrepancy between the quantity of stock available for distribution as recorded on the stock cards versus the count from a physical inventory, by ownership and facility type, UHFS 2002

Ownership and facility type	Median percent discrepancy for contraceptives	Number of facilities that manage contraceptives	Median percent discrepancy for OI/malaria/ STI drugs	Number of facilities that manage OI/malaria/ STI drugs	Median percent discrepancy for TB drugs	Number of facilities that manage TB drugs
Ownership						
Government	84.0	81.0	40.8	129.0	91.3	35
Non-government	83.0	10.0	24.9	35.0	536.0	6
Facility type						
District hospital	291.3	7.0	58.3	8.0	102.0	4
HC IV	29.0	15.0	20.0	23.0	28.3	14
HC III	62.6	39.0	36.1	83.0	100.7	10
HC II	100.6	21.0	45.9	44.0	201.7	2
District warehouse	128.9	9.0	307.1	7.0	64.9	10
Government facilities						
District hospital	291.3	7.0	58.3	8.0	102.0	4
HC IV	28.5	11.0	7.9	14.0	28.2	8
HC III	62.9	34.0	36.1	65.0	100.7	10
HC II	100.4	20.0	50.5	35.0	201.7	2
District warehouse	128.9	9.0	307.1	7.0	64.9	10
Non-government facilities						
HC IV	357.6	4.0	42.6	9.0	536.0	6
HC III	*	5.0	61.0	18.0	*	0
HC II	*	2.0	*	9.0	*	0
Total	83.9	91.0	40.4	164.0	91.5	40

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.23 Availability of staff trained in logistics

Percentage of facilities with at least one staff member trained in logistics available on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	At least one staff member trained in logistics	Number of facilities
Ownership		
Government	33.0	183
Non-government	28.7	55
Facility type		
District hospital	55.4	8
HC IV	23.1	25
HC III	28.0	117
HC II	31.2	76
District warehouse	79.6	12
Government facilities		
District hospital	55.4	8
HC IV	23.5	16
HC III	30.8	86
HC II	26.5	61
District warehouse	79.6	12
Non-government facilities		
HC IV	22.2	9
HC III	20.1	31
HC II	50.0	15
Total	32.0	238

Table G.24 Training in completing logistics forms

Percentage of respondents that reported learning how to complete logistics forms used at the facility during logistics training, during on-the-job training, through self-learning on the job, or through other means, by ownership and facility type, UHFS 2002

Ownership and facility type	Logistics training	On-the-job training	Self-learning on the job	Other	Number of facilities
Ownership					
Government	37.3	47.8	37.2	10.8	183
Non-government	34.8	41.2	20.2	13.8	55
Facility type					
District hospital	63.3	50.1	20.6	16.1	8
HC IV	25.5	66.5	47.9	11.4	25
HC III	34.2	43.7	25.7	11.3	117
HC II	32.7	43.2	45.2	10.0	76
District warehouse	92.6	46.3	7.4	20.4	12
Government facilities					
District hospital	63.3	50.1	20.6	16.1	8
HC IV	31.2	71.9	58.1	17.7	16
HC III	32.8	46.3	27.3	8.4	86
HC II	30.9	43.7	53.6	9.9	61
District warehouse	92.6	46.3	7.4	20.4	12
Non-government facilities					
HC IV	15.2	57.0	29.9	0.0	9
HC III	38.3	36.4	21.2	19.6	31
HC II	39.7	41.3	12.2	10.2	15
Total	36.7	46.3	33.2	11.5	238

Table G.25 Most recent supervisory visit

Percentage of respondents who reported receiving their most recent supervisory visit in the past month, past three months, past six months, never, or other, by ownership and facility type, UHFS 2002

Ownership and facility type	Within the past month	Within the past 3 months	Within the past 6 months	Never	Other	Number of facilities
Ownership						
Government	57.6	26.9	7.4	5.6	2.3	183
Non-government	51.8	25.3	17.1	4.3	0.0	55
Facility type						
District hospital	6.7	36.4	39.1	17.8	0.0	8
HC IV	22.5	45.4	26.2	5.9	0.0	25
HC III	69.0	19.2	8.0	1.7	1.5	117
HC II	58.8	30.1	3.2	7.5	0.0	76
District warehouse	20.4	29.6	13.0	16.7	20.4	12
Government facilities						
District hospital	6.7	36.4	39.1	17.8	0.0	8
HC IV	28.9	42.6	28.5	0.0	0.0	16
HC III	72.2	20.3	4.0	1.3	2.0	86
HC II	58.5	30.5	1.6	9.4	0.0	61
District warehouse	20.4	29.6	13.0	16.7	20.4	12
Non-government facilities						
HC IV	11.2	50.3	22.2	16.3	0.0	9
HC III	60.0	16.3	19.2	2.8	0.0	31
HC II	59.8	28.4	9.8	0.0	0.0	15
Total	56.3	26.6	9.7	5.3	1.7	238

Table G.26 Supervision of logistics practices

Percentage of facilities where the most recent supervisory visits included supervision of logistics practices (i.e., supplies and stock records checked), by ownership and facility type, UHFS 2002

Ownership and facility type	Supplies checked	Stock cards checked	Number of facilities
Ownership			
Government	73.8	72.3	183
Non-government	66.3	51.9	55
Facility type			
District hospital	69.9	82.2	8
HC IV	81.7	90.0	25
HC III	67.9	68.0	117
HC II	73.8	55.4	76
District warehouse	83.3	83.3	12
Government facilities			
District hospital	69.9	82.2	8
HC IV	83.8	93.5	16
HC III	70.2	78.4	86
HC II	74.9	54.4	61
District warehouse	83.3	83.3	12
Non-government facilities			
HC IV	77.9	83.7	9
HC III	61.4	38.8	31
HC II	69.4	59.1	15
Total	72.1	67.6	238

Table G.27 Push vs. pull ordering practices

Percentage of facilities that determine their own resupply quantities (pull) or where resupply quantities are determined by a higher level of the logistics system (push), by ownership and facility type, UHFS 2002

Ownership and facility type	Facility determines own resupply quantities (pull)	Resupply quantities are determined by facility at a higher level (push)	Other	Number of facilities
Ownership				
Government	32.4	80.4	1.7	183
Non-government	68.8	27.7	2.8	55
Facility type				
District hospital	100.0	24.5	0.0	8
HC IV	75.3	45.8	0.0	25
HC III	35.5	70.7	3.3	117
HC II	31.4	75.1	0.3	76
District warehouse	40.7	75.9	3.7	12
Government facilities				
District hospital	100.0	24.5	0.0	8
HC IV	64.7	63.9	0.0	16
HC III	28.1	83.3	2.7	86
HC II	19.4	88.7	0.4	61
District warehouse	40.7	75.9	3.7	12
Non-government facilities				
HC IV	94.2	13.5	0.0	9
HC III	56.2	35.3	5.1	31
HC II	79.1	20.9	0.0	15
Total	40.8	68.2	1.9	238

Table G.28 Frequency of commodity orders placed in the past year

Percentage of facilities that placed orders for commodities in the past year 1 to 3 times, 4 to 6 times, more than 6 times, or not at all, by ownership and facility type, UHFS 2002

	Frequency of commodity orders in past year				
Ownership and facility type	1-3 times	4-6 times	More than 6 times	None	Number of facilities
Ownership					
Government	31.7	25.2	18.3	23.9	183
Non-government	27.2	26.3	32.5	13.5	55
Facility type					
District hospital	20.0	55.5	21.7	2.8	8
HC IV	33.7	26.2	32.0	8.2	25
HC III	25.3	25.7	25.6	22.1	117
HC II	38.6	20.6	12.5	27.8	76
District warehouse	33.3	33.3	16.7	16.7	12
Government facilities					
District hospital	20.0	55.5	21.7	2.8	8
HC IV	40.4	39.5	10.6	9.5	16
HC III	24.4	23.6	24.9	25.3	86
HC II	41.0	18.3	10.8	30.0	61
District warehouse	33.3	33.3	16.7	16.7	12
Non-government facilities					
HC IV	21.7	2.4	70.1	5.8	9
HC III	27.9	31.5	27.6	13.0	31
HC II	29.1	30.0	19.6	19.3	15
Total	30.7	25.5	21.6	21.5	238

Table G.29 Distribution of commodities

Percentage of facilities reporting various means by which they receive commodities, by ownership and facility type, UHFS 2002

Ownership and facility type	Facility collects commodities	District-level facility delivers commodities	Sub-district-level facility delivers commodities	Supplier delivers commodities	Other	Number of facilities
Ownership						
Government	65.6	33.8	28.5	5.8	3.5	183
Non-government	88.8	7.4	1.7	10.9	7.7	55
Facility type						
District hospital	80.9	17.8	0.0	59.4	20.0	8
HC IV	70.2	33.0	11.6	11.8	5.9	25
HC III	78.8	29.5	27.3	0.0	0.6	117
HC II	64.1	28.7	24.1	3.9	3.9	76
District warehouse	33.3	0.0	0.0	50.0	33.3	12
Government facilities						
District hospital	80.9	17.8	0.0	59.4	20.0	8
HC IV	71.9	48.6	18.1	0.0	0.0	16
HC III	71.3	37.6	35.8	0.0	0.8	86
HC II	60.3	33.3	30.2	0.0	0.4	61
District warehouse	33.3	0.0	0.0	50.0	33.3	12
Non-government facilities						
HC IV	67.3	5.4	0.0	32.9	16.3	9
HC III	100.0	6.7	3.1	0.0	0.0	31
HC II	79.1	10.2	0.0	19.6	18.2	15
Total	71.0	27.7	22.3	7.0	4.5	238

Table G.30 Most frequently used modes of transport

Percentage of facilities that reported using various modes of transportation to transport commodities to their facility, by ownership and facility type, UHFS 2002

Ownership and facility type	Public transportation	Facility-managed vehicle	Private, hired vehicle	Bicycle	Other	Number of facilities
Ownership						
Government	47.8	48.2	4.8	4.5	10.3	183
Non-government	69.5	26.9	3.2	0.0	13.4	55
Facility type						
District hospital	37.1	65.8	17.8	2.8	36.2	8
HC IV	2.1	91.2	5.9	0.0	6.8	25
HC III	62.8	39.6	3.0	4.9	7.1	117
HC II	64.2	30.2	3.6	3.2	7.7	76
District warehouse	0.0	46.3	11.1	0.0	63.0	12
Government facilities						
District hospital	37.1	65.8	17.8	2.8	36.2	8
HC IV	0.0	98.7	6.2	0.0	0.0	16
HC III	51.9	48.5	2.7	6.6	9.6	86
HC II	65.5	32.2	4.6	4.0	0.4	61
District warehouse	0.0	46.3	11.1	0.0	63.0	12
Non-government facilities						
HC IV	5.8	77.8	5.4	0.0	18.8	9
HC III	93.7	14.2	4.1	0.0	0.0	31
HC II	58.9	22.0	0.0	0.0	37.1	15
Total	52.8	43.3	4.4	3.5	11.0	238

Table G.31 Compliance with minimum criteria for storage conditions

Percent distribution of facility storage areas where health commodities are kept by proportion met (less than 50%, 50% to 75% or more than 75%) of minimum criteria for storage conditions (conditions 1-13 only), according to ownership and facility type, UHFS 2002

Ownership and facility type	Proportion met of minimum criteria for storage conditions			Total	Number of facility storage areas
	< 50%	50-75%	> 75%		
Ownership					
Government	16.1	32.3	51.5	100.0	196
Non-government	12.7	14.9	72.4	100.0	55
Facility type					
District hospital	15.6	39.3	45.2	100.0	11
HC IV	15.4	24.1	60.5	100.0	29
HC III	13.0	31.4	55.6	100.0	121
HC II	19.1	23.7	57.1	100.0	77
District warehouse	15.5	31.0	53.4	100.0	13
Government facilities					
District hospital	15.6	39.3	45.2	100.0	11
HC IV	22.5	35.3	42.2	100.0	20
HC III	13.0	36.3	50.7	100.0	90
HC II	18.9	24.6	56.4	100.0	62
District warehouse	15.5	31.0	53.4	100.0	13
Non-government facilities					
HC IV	0.0	0.0	100.0	100.0	9
HC III	13.0	16.9	70.2	100.0	31
HC II	20.0	20.0	60.0	100.0	15
Total	15.4	28.5	56.1	100.0	251

Table G.32 Compliance with individual criteria for facility storage conditions

Percentage of facility storage areas where health commodities are kept that meet each of 13 storage conditions, by ownership and facility type, UHFS 2002

Ownership and facility type	Labels/ expiry dates visible	Accessible for FEFO	Cartons, products in good condition	Damaged & expired products separated & removed	Protected from direct sunlight	Protected from water & humidity	Free from insects & rodents	Secured with lock & key	Stored at appropriate temperature	Hazardous waste properly disposed of	Roof in good condition	Storeroom in good condition	Sufficient space	Number of facility storage areas
Ownership														
Government	60.1	62.1	74.8	60.8	90.5	78.1	58.8	90.0	87.2	69.2	81.1	47.1	49.3	196
Non-government	71.2	75.7	78.5	67.0	90.4	89.9	78.6	87.7	92.0	78.7	82.4	68.5	58.0	55
Facility type														
District hospital	75.5	72.9	45.2	66.4	97.4	79.9	60.0	100.0	100.0	71.5	70.9	35.8	69.7	11
HC IV	71.0	70.5	88.4	59.5	96.6	84.2	85.7	96.3	82.7	74.8	90.5	60.5	32.2	29
HC III	62.7	66.3	77.7	63.6	91.1	82.3	65.2	90.7	91.7	75.8	82.5	53.0	50.4	121
HC II	62.2	63.0	71.2	58.4	87.3	80.9	50.2	84.4	83.6	63.8	76.7	48.7	59.9	77
District warehouse	32.8	46.6	81.0	72.4	84.5	56.9	72.4	84.5	84.5	65.5	87.9	53.4	31.0	13
Government facilities														
District hospital	75.5	72.9	45.2	66.4	97.4	79.9	60.0	100.0	100.0	71.5	70.9	35.8	69.7	11
HC IV	65.2	56.8	83.0	50.9	95.0	76.9	79.1	94.6	74.7	70.7	86.1	44.7	16.2	20
HC III	57.5	64.6	76.6	62.4	90.6	77.6	63.1	89.9	90.5	72.2	82.3	47.3	50.3	90
HC II	65.2	61.4	73.9	58.1	89.0	83.3	43.1	88.2	84.5	64.7	78.2	48.3	58.1	62
District warehouse	32.8	46.6	81.0	72.4	84.5	56.9	72.4	84.5	84.5	65.5	87.9	53.4	31.0	13
Non-government facilities														
HC IV	83.7	100.0	100.0	77.9	100.0	100.0	100.0	100.0	100.0	83.7	100.0	94.6	66.8	9
HC III	77.9	71.5	81.0	67.1	92.6	96.3	71.5	93.2	95.4	86.3	83.2	69.5	50.7	31
HC II	49.6	69.6	60.0	60.0	80.0	70.7	80.0	68.7	80.0	60.0	70.0	50.3	67.5	15
Total	62.5	65.1	75.6	62.1	90.5	80.7	63.1	89.5	88.2	71.2	81.4	51.7	51.2	251

Table G.33 Facilities providing HIV/AIDS services

Among facilities that provide HIV/AIDS services, percentage that offer VCT, PMTCT, youth-friendly programs, OVC activities, social support/post-test services, home-based care, OI services, STI services, and TB diagnosis and treatment, by ownership and facility type, UHFS 2002

Ownership and facility type	VCT	PMTCT	Youth-friendly programs	Activities for OVCs	Social support/post test services for HIV+ & family	Home-based care	Management (prevention, diagnosis and treatment) of OIs in HIV/AIDS patients	STIs	TB Dx	TB Rx	Any services	Number of facilities
Ownership												
Government	7.2	5.6	11.4	2.5	7.8	10.2	61.1	67.0	21.8	32.4	78.6	171
Non-government	20.7	4.9	11.7	14.5	7.4	15.8	67.9	85.7	26.8	26.9	91.3	55
Facility type												
District hospital	51.4	0.0	39.1	0.0	50.6	31.4	78.1	80.0	97.2	97.2	100.0	8
HC IV	59.9	15.2	24.4	24.7	25.6	19.2	83.3	83.8	76.8	88.7	99.1	25
HC III	2.7	7.2	8.7	5.2	4.7	10.6	61.7	71.8	19.9	28.6	82.0	117
HC II	1.8	0.0	8.6	0.0	1.8	8.6	55.9	66.2	2.2	8.6	73.6	76
Government facilities												
District hospital	51.4	0.0	39.1	0.0	50.6	31.4	78.1	80.0	97.2	97.2	100.0	8
HC IV	40.5	13.2	23.4	17.7	26.8	8.5	86.1	74.7	73.0	82.4	98.7	16
HC III	2.1	8.7	10.5	1.7	5.8	10.0	62.8	67.6	20.7	32.2	79.3	86
HC II	0.0	0.0	5.8	0.0	0.0	8.3	49.8	62.5	0.0	10.7	69.5	61
Non-government facilities												
HC IV	94.6	18.8	26.3	37.3	23.4	38.1	78.2	100.0	83.6	100.0	100.0	9
HC III	4.5	3.1	3.4	14.9	1.7	12.1	58.8	83.9	17.8	18.5	89.5	31
HC II	9.1	0.0	19.6	0.0	9.1	9.8	79.9	80.7	11.1	0.0	89.8	15
Total	10.5	5.5	11.5	5.4	7.7	11.6	62.8	71.6	23.0	31.0	81.7	226

Note: Services available either on day of interview or at another time.
VCT = voluntary counseling and testing; PMTCT = prevention of mother-to-child transmission; OVC = orphans and vulnerable children; OI = opportunistic infection; STI = sexually transmitted infection; TB = tuberculosis; Dx = diagnosis; Rx = treatment

Table G.34 Availability of VCT service components

Percentage of facilities that offer various VCT program components including counseling, testing, post-testing and outreach, the median number of days of outreach service per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as VCT guidelines, VCT visual aids and registers, by ownership and facility type, UHFS 2002

Ownership and facility type	Program components				Median days per month of outreach	Median days per week services available	Partner organization available	VCT guidelines			VCT visual aid			Register		Number of facilities
	Counseling on request	Testing	Post-test counseling	Outreach				Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	
Ownership																
Government	100.0	97.6	100.0	64.3	1.8	5	34.2	63.1	14.5	22.4	46.8	10.1	43.1	60.9	39.1	12
Non-government	100.0	100.0	100.0	85.0	5.8	6	68.3	25.3	52.4	22.3	52.3	17.8	29.9	69.2	30.8	11
Facility type																
District hospital	100.0	100.0	100.0	61.1	4.2	5	23.8	62.8	37.2	0.0	38.9	23.8	37.2	23.8	76.2	4
HC IV	100.0	100.0	100.0	70.0	4.2	6	53.8	44.7	32.2	23.2	48.1	13.3	38.5	74.9	25.1	15
HC III	100.0	90.5	100.0	100.0	2.1	6	46.9	0.0	43.6	56.4	46.9	9.5	43.6	53.1	46.9	3
HC II	100.0	100.0	100.0	100.0	*	*	100.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	1
Government facilities																
District hospital	100.0	100.0	100.0	61.1	4.2	5	23.8	62.8	37.2	0.0	38.9	23.8	37.2	23.8	76.2	4
HC IV	100.0	100.0	100.0	56.6	*	4	27.2	80.5	4.6	14.9	41.7	0.0	58.3	95.4	4.6	7
HC III	100.0	83.2	100.0	100.0	1.6	*	83.2	0.0	0.0	100.0	83.2	16.8	0.0	16.8	83.2	2
Non-government facilities																
HC IV	100.0	100.0	100.0	80.2	5.8	6	74.1	17.4	53.2	29.4	53.1	23.5	23.5	59.3	40.7	9
HC III	100.0	100.0	100.0	100.0	*	*	0.0	0.0	100.0	0.0	0.0	0.0	100.0	100.0	0.0	1
HC II	100.0	100.0	100.0	100.0	*	*	100.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	1
Total	100.0	98.7	100.0	74.3	4.0	6	50.5	45.0	32.7	22.4	49.4	13.8	36.8	64.9	35.1	2

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.35 Availability of VCT services on the day of the visit

Among health care facilities with VCT services, percentage with services available, specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	26.1	73.9	71.8	28.2	0.0	5.2	5	12
Non-government	45.0	55.0	43.0	44.9	12.2	6.5	6	11
Facility type								
District hospital	23.8	76.2	76.2	23.8	0.0	4.7	5	4
HC IV	39.6	60.4	51.7	39.2	9.1	6.1	6	15
HC III	0.0	100.0	46.9	53.1	0.0	4.3	6	3
HC II	100.0	0.0	100.0	0.0	0.0	*	*	1
Government facilities								
District hospital	23.8	76.2	76.2	23.8	0.0	4.7	5	4
HC IV	34.7	65.3	66.0	34.0	0.0	6.3	4	7
HC III	0.0	100.0	83.2	16.8	0.0	2.6	*	2
HC II	*	*	*	*	*	*	*	0
Non-government facilities								
HC IV	43.4	56.6	40.7	43.2	16.1	5.5	6	9
HC III	0.0	100.0	0.0	100.0	0.0	*	*	1
HC II	100.0	0.0	100.0	0.0	0.0	*	*	1
Total	35.2	64.8	58.0	36.2	5.8	5.8	6	24

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.36 Availability of PMTCT service components

Percentage of facilities that offer various PMTCT program components including testing, counseling on breastfeeding, provision of formula, ART, and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as PMTCT guidelines, PMTCT visual aids and registers, by ownership and facility type, UHFS 2002

	Program components								PMTCT guidelines				PMTCT visual aid				Register			
Ownership and facility type	HIV test for pregnant women	Counsel on breast-feed	Provide formula	ART	Out-reach	Median days per month of outreach	Median days per week services available	Partner organi-zation avail-able	Yes, ob-served	Yes, not seen	None	Don't know	Yes, ob-served	Yes, not seen	None	Don't know	Yes, ob-served	Yes, not seen	None	Number of facilities
Ownership																				
Government	10.5	100.0	0.0	15.4	63.1	4.0	7	13.0	15.4	9.9	72.5	2.3	0.0	19.7	77.2	3.1	42.6	5.1	52.3	10
Non-government	8.2	100.0	8.2	35.7	35.7	*	6	100.0	0.0	64.3	35.7	0.0	8.2	56.1	35.7	0.0	8.2	35.7	56.1	3
Facility type																				
HC IV	24.0	100.0	5.6	0.0	12.7	*	6	44.4	0.0	44.4	50.0	5.6	5.6	38.7	55.6	0.0	30.3	12.7	57.1	4
HC III	3.6	100.0	0.0	28.9	77.5	4.2	7	26.1	17.6	11.3	71.1	0.0	0.0	22.5	73.9	3.6	37.4	11.3	51.4	8
Government facilities																				
HC IV	32.9	100.0	0.0	0.0	22.8	*	6	0.0	0.0	0.0	89.9	10.1	0.0	0.0	100.0	0.0	44.3	22.8	32.9	2
HC III	4.0	100.0	0.0	19.8	74.6	4.1	7	16.7	19.8	12.7	67.5	0.0	0.0	25.4	70.6	4.0	42.1	0.0	57.9	8
Non-government facilities																				
HC IV	12.7	100.0	12.7	0.0	0.0	*	6	100.0	0.0	100.0	0.0	0.0	12.7	87.3	0.0	0.0	12.7	0.0	87.3	2
HC III	0.0	100.0	0.0	100.0	100.0	*	*	100.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	1
Total	10.0	100.0	1.8	19.8	57.1	4.1	6	31.8	12.1	21.7	64.5	1.8	1.8	27.6	68.2	2.4	35.1	11.7	53.2	12

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.37 Availability of PMTCT services on the day of the visit

Among health care facilities with PMTCT services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

	Services available		Special vs. integrated					
Ownership and facility type	Observed today	Reported today	Specialized service	Integrated service	Both	Median number of staff	Median days available per week	Number of facilities
Ownership								
Government	32.7	67.3	0.0	100.0	0.0	3.7	7	10
Non-government	100.0	0.0	0.0	100.0	0.0	4.3	6	3
Facility type								
District hospital	*	*	*	*	*	*	*	0
HC IV	44.4	55.6	0.0	100.0	0.0	4.6	6	4
HC III	48.6	51.4	0.0	100.0	0.0	3.0	7	8
HC II	*	*	*	*	*	*	*	0
Government facilities								
District hospital	*	*	*	*	*	*	*	0
HC IV	0.0	100.0	0.0	100.0	0.0	5.1	6	2
HC III	42.1	57.9	0.0	100.0	0.0	3.4	7	8
HC II	*	*	*	*	*	*	*	0
Non-government facilities								
HC IV	100.0	0.0	0.0	100.0	0.0	4.6	6	2
HC III	100.0	0.0	0.0	100.0	0.0	*	*	1
HC II	*	*	*	*	*	*	*	0
Total	47.3	52.7	0.0	100.0	0.0	3.9	6	12

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.38 Availability of OI service components

Percentage of facilities that offer various OI program components including laboratory diagnosis, x-ray services, prescribe treatment, counseling and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as OI guidelines, OI visual aids and registers, by ownership and facility type, UHFS 2002

	Program components					Median days per month of outreach	Median days per week services available	Partner organization available	OI guidelines			OI visual aid			Register			Number of facilities
Ownership and facility type	Lab Dx	X-ray	Prescribe drugs	Counseling	Outreach				Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	
Ownership																		
Government	26.1	4.3	99.1	85.0	46.8	2.2	7	14.6	50.1	4.9	45.0	43.7	1.9	54.3	76.3	12.2	11.5	105
Non-government	45.4	15.1	100.0	94.2	52.1	2.7	7	41.5	41.1	34.6	24.3	56.8	0.0	43.2	75.5	20.8	3.7	37
Facility type																		
District hospital	100.0	74.4	100.0	95.0	95.0	3.0	6	27.8	29.1	0.0	70.9	22.8	0.0	77.2	75.3	0.0	24.7	6
HC IV	93.4	26.7	100.0	85.7	72.6	8.1	7	51.2	26.1	28.5	45.4	65.6	2.9	31.6	67.0	24.6	8.4	21
HC III	15.3	0.0	98.7	89.0	38.8	*	7	19.2	48.5	11.6	39.8	50.0	2.0	48.0	76.7	15.2	8.1	72
HC II	17.2	0.0	100.0	84.7	45.3	1.6	7	10.3	60.0	8.5	31.6	36.6	0.0	63.4	79.7	10.3	10.0	42
Government facilities																		
District hospital	100.0	74.4	100.0	95.0	95.0	3.0	6	27.8	29.1	0.0	70.9	22.8	0.0	77.2	75.3	0.0	24.7	6
HC IV	90.1	0.0	100.0	80.0	74.7	4.6	7	42.3	39.4	2.7	57.9	62.5	4.3	33.2	85.2	2.2	12.7	14
HC III	13.1	0.0	98.2	86.0	39.1	1.4	7	14.1	46.8	8.7	44.5	50.3	2.6	47.1	74.2	15.0	10.8	54
HC II	4.9	0.0	100.0	83.6	38.0	*	7	0.0	65.5	0.0	34.5	27.3	0.0	72.7	76.1	14.4	9.5	30
Non-government facilities																		
HC IV	100.0	79.0	100.0	96.9	68.5	11.4	7	68.7	0.0	79.1	20.9	71.6	0.0	28.4	31.3	68.7	0.0	7
HC III	22.1	0.0	100.0	97.9	38.0	*	7	34.6	53.9	20.5	25.7	49.1	0.0	50.9	84.1	15.9	0.0	18
HC II	47.8	0.0	100.0	87.2	63.4	2.5	7	35.9	46.4	29.4	24.2	59.5	0.0	40.5	88.6	0.0	11.4	12
Total	31.1	7.2	99.3	87.5	48.2	2.5	7	21.7	47.8	12.7	39.5	47.2	1.4	51.4	76.1	14.5	9.4	142

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.39 Availability of OI services on the day of the visit

Among health care facilities with OI services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	25.0	75.0	3.2	96.8	0.0	4.3	7	105
Non-government	14.0	86.0	4.0	96.0	0.0	3.9	7	37
Facility type								
District hospital	75.3	24.7	25.6	74.4	0.0	5.5	6	6
HC IV	21.5	78.5	15.5	84.5	0.0	8.3	7	21
HC III	19.6	80.4	0.0	100.0	0.0	4.4	7	72
HC II	19.1	80.9	0.0	100.0	0.0	3.2	7	42
Government facilities								
District hospital	75.3	24.7	25.6	74.4	0.0	5.5	6	6
HC IV	32.5	67.5	12.8	87.2	0.0	7.7	7	14
HC III	20.1	79.9	0.0	100.0	0.0	4.6	7	54
HC II	20.2	79.8	0.0	100.0	0.0	3.0	7	30
Non-government facilities								
HC IV	0.0	100.0	20.9	79.1	0.0	14.9	7	7
HC III	18.0	82.0	0.0	100.0	0.0	3.8	7	18
HC II	16.3	83.7	0.0	100.0	0.0	3.4	7	12
Total	22.1	77.9	3.4	96.6	0.0	4.2	7	142

Table G.40 Availability of OVC service components

Percentage of facilities that offer various OVC program components including counseling, support group meetings, and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as OVC guidelines, OVC visual aids and registers, by ownership and facility type, UHFS 2002

	Program components							OVC guidelines			OVC visual aid			Register			
Ownership and facility type	Coun-seling	Provide support	Organize groups	Outreach	Median days per month of outreach	Median days per week services available	Partner organi-zation available	Yes, ob-served	Yes, not seen	None	Yes, ob-served	Yes, not seen	None	Yes, ob-served	Yes, not seen	None	Number of facili-ties
Ownership																	
Government	87.9	34.2	0.0	66.0	8.0	7	87.9	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	4
Non-government	100.0	57.5	81.4	61.3	4.2	5	42.6	0.0	20.2	79.8	25.3	26.8	47.9	66.6	33.4	0.0	8
Facility type																	
HC IV	100.0	77.9	54.2	100.0	4.9	6	76.3	0.0	22.1	77.9	23.7	30.5	45.8	30.5	23.7	45.8	6
HC III	91.3	19.4	51.0	24.5	*	7	40.3	0.0	3.6	96.4	8.7	3.6	87.7	56.1	19.4	24.5	6
Government facilities																	
HC IV	100.0	51.8	0.0	100.0	8.0	*	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	3
HC III	64.4	0.0	0.0	0.0	*	*	64.4	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	1
Non-government facilities																	
HC IV	100.0	100.0	100.0	100.0	4.9	2	56.2	0.0	40.8	59.2	43.8	56.2	0.0	56.2	43.8	0.0	3
HC III	100.0	25.7	67.5	32.5	*	7	32.5	0.0	4.8	95.2	11.6	4.8	83.7	74.3	25.7	0.0	5
Total	95.7	49.2	52.6	63.0	4.2	7	58.6	0.0	13.0	87.0	16.4	17.3	66.3	43.0	21.6	35.4	12

Note: OVC = Orphans and vulnerable children; an asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.41 Availability of OVC services on the day of the visit

Among health care facilities with OVC services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	0.0	100.0	56.1	43.9	0.0	6.5	7	4
Non-government	2.7	97.3	28.1	71.9	0.0	5.1	5	8
Facility type								
District hospital	*	*	*	*	*	*	*	0
HC IV	0.0	100.0	55.8	44.2	0.0	6.8	6	6
HC III	3.6	96.4	19.4	80.6	0.0	3.9	7	6
HC II	*	*	*	*	*	*	*	0
Government facilities								
District hospital	*	*	*	*	*	*	*	0
HC IV	0.0	100.0	51.8	48.2	0.0	7.0	*	3
HC III	0.0	100.0	64.4	35.6	0.0	1.8	*	1
HC II	*	*	*	*	*	*	*	0
Non-government facilities								
HC IV	0.0	100.0	59.2	40.8	0.0	4.4	2	3
HC III	4.8	95.2	4.8	95.2	0.0	5.2	7	5
HC II	*	*	*	*	*	*	*	0
Total	1.8	98.2	38.0	62.0	0.0	5.3	7	12

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.42 Availability of youth-friendly service components

Percentage of facilities that offer various youth-friendly program components including group meetings, information campaigns, VCT, STI treatment and diagnosis, family planning services, safe motherhood services, and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and youth-friendly guidelines, youth-friendly visual aids, and registers, by ownership and facility type, UHFS 2002

	Program components										
Ownership and facility type	Group meetings	Info campaigns	VCT	STI Dx and Tx	Family planning	Safe motherhood	Outreach	Median days per month of outreach	Median days per week services available	Partner organization available	Number of facilities
Ownership											
Government	63.1	86.2	35.0	93.4	93.6	85.9	83.3	4.4	5	33.1	19
Non-government	52.9	44.8	37.8	100.0	91.8	91.8	91.8	5.8	3	60.6	6
Facility type											
District hospital	100.0	100.0	100.0	100.0	100.0	100.0	100.0	*	*	51.1	3
HC IV	52.4	77.5	30.8	93.9	85.4	85.4	66.5	8.6	5	54.2	6
HC III	62.6	66.8	32.4	96.3	96.3	96.3	88.1	4.4	2	38.8	10
HC II	46.7	77.2	15.6	91.9	92.5	69.5	92.5	2.0	3	23.0	7
Government facilities											
District hospital	100.0	100.0	100.0	100.0	100.0	100.0	100.0	*	*	51.1	3
HC IV	49.1	90.0	0.0	90.0	90.0	90.0	59.1	*	6	39.2	4
HC III	64.1	74.6	30.3	95.8	95.8	95.8	86.7	4.5	2	37.5	9
HC II	43.7	100.0	28.8	85.1	86.1	43.7	86.1	2.0	7	0.0	4
Non-government facilities											
HC IV	57.7	57.7	79.6	100.0	78.1	78.1	78.1	8.3	5	78.1	2
HC III	50.0	0.0	50.0	100.0	100.0	100.0	100.0	2.0	*	50.0	1
HC II	50.2	50.2	0.0	100.0	100.0	100.0	100.0	*	*	50.2	3
Total	60.6	75.9	35.7	95.0	93.1	87.4	85.4	4.4	5	40.0	26

	Youth-friendly guidelines				Youth-friendly visual aid				Register				
Ownership and facility type	Yes, observed	Yes, not seen	None	Don't know	Yes, observed	Yes, not seen	None	Don't know	Yes, observed	Yes, not seen	None	Don't know	Number of facilities
Ownership													
Government	3.9	34.5	61.6	0.0	19.2	37.8	42.9	0.0	40.8	41.1	15.4	2.7	19
Non-government	0.0	21.5	55.2	23.3	52.8	8.2	15.8	23.3	37.8	54.5	7.6	0.0	6
Facility type													
District hospital	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	51.1	48.9	0.0	0.0	3
HC IV	6.1	28.4	65.5	0.0	28.4	38.6	33.0	0.0	53.5	32.5	14.0	0.0	6
HC III	3.7	32.5	63.8	0.0	23.5	24.2	52.3	0.0	54.4	29.5	16.1	0.0	10
HC II	0.0	0.0	77.0	23.0	46.0	0.0	31.1	23.0	0.0	76.9	15.1	8.1	7
Government facilities													
District hospital	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	51.1	48.9	0.0	0.0	3
HC IV	10.0	10.0	80.1	0.0	10.0	49.1	40.9	0.0	50.9	39.2	10.0	0.0	4
HC III	4.2	36.2	59.6	0.0	20.5	27.0	52.5	0.0	49.1	32.9	18.0	0.0	9
HC II	0.0	0.0	100.0	0.0	42.7	0.0	57.3	0.0	0.0	57.3	27.8	14.9	4
Non-government facilities													
HC IV	0.0	57.7	42.3	0.0	57.7	21.9	20.4	0.0	57.7	21.9	20.4	0.0	2
HC III	0.0	0.0	100.0	0.0	50.0	0.0	50.0	0.0	100.0	0.0	0.0	0.0	1
HC II	0.0	0.0	49.8	50.2	49.8	0.0	0.0	50.2	0.0	100.0	0.0	0.0	3
Total	2.9	31.3	60.0	5.8	27.6	30.5	36.2	5.8	40.1	44.4	13.5	2.0	26

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.43 Availability of youth-friendly services on the day of the visit

Among health care facilities with youth-friendly services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	1.9	98.1	7.7	92.3	0.0	3.8	5	19
Non-government	0.0	100.0	23.1	76.9	0.0	2.9	3	6
Facility type								
District hospital	0.0	100.0	0.0	100.0	0.0	2.0	*	3
HC IV	0.0	100.0	0.0	100.0	0.0	3.4	5	6
HC III	3.7	96.3	14.7	85.3	0.0	3.9	2	10
HC II	0.0	100.0	22.8	77.2	0.0	3.5	3	7
Government facilities								
District hospital	0.0	100.0	0.0	100.0	0.0	2.0	*	3
HC IV	0.0	100.0	0.0	100.0	0.0	3.9	6	4
HC III	4.2	95.8	16.4	83.6	0.0	4.1	2	9
HC II	0.0	100.0	0.0	100.0	0.0	3.5	6	4
Non-government facilities								
HC IV	0.0	100.0	0.0	100.0	0.0	2.9	5	2
HC III	0.0	100.0	0.0	100.0	0.0	3.0	*	1
HC II	0.0	100.0	49.8	50.2	0.0	2.0	*	3
Total	1.5	98.5	11.5	88.5	0.0	3.7	5	26

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.44 Availability of home-based care service components

Percentage of facilities that offer various home-based care program components including providing service in homes, training caretakers, material support, community education and advocacy, and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as home-based care guidelines, home-based care visual aids and registers, by ownership and facility type, UHFS 2002

	Program components								Home-based care guidelines			Home-based care visual aid			Register			
Ownership and facility type	Service in homes	Train care-takers	Mate-rial sup-port	Commu-nity edu-cation and advocacy	Out-reach	Median days per month of outreach	Median days per week services available	Partner organi-zation available	Yes, ob-served	Yes, not seen	None	Yes, ob-served	Yes, not seen	None	Yes, ob-served	Yes, not seen	None	Num-ber of facili-ties
Ownership																		
Government	97.2	91.1	0.0	88.3	88.3	4.0	2	21.9	0.0	25.5	74.5	5.4	17.0	77.5	16.8	8.5	74.7	18
Non-government	83.4	94.0	42.9	100.0	86.5	4.6	2	57.7	0.0	36.8	63.2	17.1	60.2	22.6	42.9	17.0	40.1	9
Facility type																		
District hospital	100.0	100.0	0.0	100.0	100.0	*	7	39.0	0.0	61.0	39.0	39.0	61.0	0.0	0.0	0.0	100.0	2
HC IV	89.9	100.0	61.4	100.0	100.0	5.4	3	59.3	0.0	61.4	38.6	30.6	30.8	38.6	89.9	0.0	10.1	5
HC III	92.3	95.8	6.0	100.0	90.6	1.9	2	28.4	0.0	13.9	86.1	0.0	30.2	69.8	6.0	23.9	70.1	12
HC II	92.5	76.2	0.0	68.6	68.6	4.5	2	23.0	0.0	22.8	77.2	0.0	23.0	77.0	23.8	0.0	76.2	7
Government facili-ties																		
District hospital	100.0	100.0	0.0	100.0	100.0	*	7	39.0	0.0	61.0	39.0	39.0	61.0	0.0	0.0	0.0	100.0	2
HC IV	100.0	100.0	0.0	100.0	100.0	*	*	100.0	0.0	0.0	100.0	0.0	0.0	100.0	100.0	0.0	0.0	1
HC III	100.0	100.0	0.0	100.0	100.0	1.7	2	17.3	0.0	17.3	82.7	0.0	17.3	82.7	0.0	17.2	82.8	9
HC II	90.2	69.0	0.0	59.3	59.3	5.0	2	0.0	0.0	29.6	70.4	0.0	0.0	100.0	31.0	0.0	69.0	5
Non-government facilities																		
HC IV	85.9	100.0	85.9	100.0	100.0	5.8	4	43.1	0.0	85.9	14.1	42.8	43.1	14.1	85.9	0.0	14.1	3
HC III	74.4	85.9	20.0	100.0	68.5	4.1	2	54.4	0.0	5.9	94.1	0.0	60.3	39.7	20.0	39.7	40.3	4
HC II	100.0	100.0	0.0	100.0	100.0	*	*	100.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	100.0	1
Total	92.6	92.1	14.2	92.2	87.7	4.2	2	33.8	0.0	29.3	70.7	9.3	31.4	59.3	25.4	11.3	63.2	26

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.45 Availability of home-based care services on the day of the visit

Among health care facilities with home-based services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	5.4	94.6	25.5	74.5	0.0	3.6	2	18
Non-government	5.6	94.4	42.9	57.1	0.0	3.3	2	9
Facility type								
District hospital	39.0	61.0	61.0	39.0	0.0	4.8	7	2
HC IV	10.1	89.9	61.4	38.6	0.0	3.8	3	5
HC III	0.0	100.0	6.0	94.0	0.0	3.6	2	12
HC II	0.0	100.0	45.6	54.4	0.0	2.7	2	7
Government facilities								
District hospital	39.0	61.0	61.0	39.0	0.0	4.8	7	2
HC IV	0.0	100.0	0.0	100.0	0.0	*	*	1
HC III	0.0	100.0	0.0	100.0	0.0	3.9	2	9
HC II	0.0	100.0	59.3	40.7	0.0	2.8	2	5
Non-government facilities								
HC IV	14.1	85.9	85.9	14.1	0.0	5.5	4	3
HC III	0.0	100.0	20.0	80.0	0.0	3.1	2	4
HC II	0.0	100.0	0.0	100.0	0.0	*	*	1
Total	5.5	94.5	31.3	68.7	0.0	3.5	2	26

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.46 Availability of social support/post-test service components

Percentage of facilities that offer various social support program components including counseling, support group meetings, social support programs, and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as social support/post-test guidelines, social support/post-test visual aids and registers, by ownership and facility type, UHFS 2002

Ownership and facility type	Program components				Median days per month of outreach	Median days per week services available	Partner organization available	Social support/post-test guidelines			Social support/post-test visual aid			Register			Number of facilities
	Counseling	Provide support	Social support programs	Outreach				Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	
Ownership																	
Government	100.0	11.2	56.0	87.1	4.1	5	60.0	11.2	33.7	55.1	29.5	11.2	59.3	35.1	40.7	24.2	13
Non-government	100.0	52.7	100.0	94.6	5.0	3	94.6	34.3	5.4	60.3	87.0	13.0	0.0	52.7	47.3	0.0	4
Facility type																	
District hospital	100.0	0.0	75.8	62.0	4.2	6	38.0	0.0	75.8	24.2	24.2	37.8	38.0	0.0	62.0	38.0	4
HC IV	100.0	34.4	55.7	96.6	5.2	5	75.3	22.9	3.4	73.7	47.6	8.1	44.3	47.6	52.4	0.0	6
HC III	100.0	0.0	63.4	96.0	4.4	2	73.0	0.0	27.1	72.9	36.5	0.0	63.5	41.9	27.0	31.1	6
HC II	100.0	100.0	100.0	100.0	*	*	100.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	1
Government facilities																	
District hospital	100.0	0.0	75.8	62.0	4.2	6	38.0	0.0	75.8	24.2	24.2	37.8	38.0	0.0	62.0	38.0	4
HC IV	100.0	34.1	34.1	100.0	3.5	6	68.2	34.1	0.0	65.9	34.1	0.0	65.9	65.9	34.1	0.0	4
HC III	100.0	0.0	59.6	95.6	4.5	2	70.2	0.0	30.0	70.0	29.8	0.0	70.2	35.8	29.8	34.4	5
Non-government facilities																	
HC IV	100.0	34.9	100.0	89.8	5.7	3	89.8	0.0	10.2	89.8	75.3	24.7	0.0	10.2	89.8	0.0	2
HC III	100.0	0.0	100.0	100.0	*	*	100.0	0.0	0.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	1
HC II	100.0	100.0	100.0	100.0	*	*	100.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	1
Total	100.0	20.9	66.3	88.8	4.4	3	68.1	16.6	27.1	56.3	42.9	11.6	45.4	39.2	42.3	18.5	17

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.47 Availability of social support services on the day of the visit

Among health care facilities with social support services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	9.4	90.6	29.5	59.2	11.3	4.2	5	13
Non-government	34.3	65.7	52.7	13.0	34.3	9.5	3	4
Facility type								
District hospital	24.2	75.8	62.0	0.0	38.0	4.7	6	4
HC IV	0.0	100.0	34.4	44.3	21.3	4.9	5	6
HC III	5.5	94.5	0.0	100.0	0.0	2.9	2	6
HC II	100.0	0.0	100.0	0.0	0.0	*	*	1
Government facilities								
District hospital	24.2	75.8	62.0	0.0	38.0	4.7	6	4
HC IV	0.0	100.0	34.1	65.9	0.0	4.5	6	4
HC III	6.0	94.0	0.0	100.0	0.0	2.8	2	5
HC II	*	*	*	*	*	*	*	0
Non-government facilities								
HC IV	0.0	100.0	34.9	0.0	65.1	9.2	3	2
HC III	0.0	100.0	0.0	100.0	0.0	*	*	1
HC II	100.0	0.0	100.0	0.0	0.0	*	*	1
Total	15.2	84.8	34.9	48.4	16.6	4.4	3	17

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.48 Availability of STI services on the day of the visit

Among health care facilities with STI services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	29.0	71.0	0.8	99.2	0.0	4.2	7	115
Non-government	19.4	80.6	0.0	93.9	6.1	4.3	7	47
Facility type								
District hospital	48.5	51.5	15.3	84.7	0.0	11.1	7	6
HC IV	35.0	65.0	0.0	86.5	13.5	7.7	7	21
HC III	20.7	79.3	0.0	100.0	0.0	4.6	7	84
HC II	28.7	71.3	0.0	100.0	0.0	3.3	7	50
Government facilities								
District hospital	48.5	51.5	15.3	84.7	0.0	11.1	7	6
HC IV	33.6	66.4	0.0	100.0	0.0	6.8	7	12
HC III	23.4	76.6	0.0	100.0	0.0	4.8	7	58
HC II	32.8	67.2	0.0	100.0	0.0	3.3	7	38
Non-government facilities								
HC IV	37.0	63.0	0.0	68.5	31.5	7.8	7	9
HC III	14.6	85.4	0.0	100.0	0.0	4.1	7	26
HC II	16.2	83.8	0.0	100.0	0.0	3.6	7	12
Total	26.2	73.8	0.6	97.6	1.8	4.2	7	162

Table G.49 Availability of TB diagnosis service components

Percentage of facilities that offer various TB diagnosis program components including routine sputum test, symptomatic testing, diagnosis without testing, x-ray services and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as TB diagnosis guidelines, TB diagnosis visual aids and registers, by ownership and facility type, UHFS 2002

	Program components					Median days per month of outreach	Median days per week services available	Partner organization available	TB diagnosis guidelines				TB diagnosis visual aid				Register				Number of facilities
Ownership and facility type	Routine sputum test	Test if symptomatic	Dx w/out test	X-ray	Outreach				Yes, observed	Yes, not seen	None	Don't know	Yes, observed	Yes, not seen	None	Don't know	Yes, observed	Yes, not seen	None	Don't know	
Ownership																					
Government	51.4	73.0	51.4	18.9	51.4	4.0	7	16.2	21.6	45.9	32.4	0.0	32.4	29.7	35.1	2.7	73.0	10.8	10.8	5.4	37
Non-government	46.7	100.0	33.3	46.7	20.0	*	7	40.0	26.7	33.3	33.3	6.7	33.3	6.7	60.0	0.0	66.7	26.7	0.0	6.7	15
Facility type																					
District hospital	85.7	100.0	57.1	85.7	28.6	*	7	14.3	42.9	14.3	42.9	0.0	42.9	14.3	42.9	0.0	100.0	0.0	0.0	0.0	7
HC IV	52.4	90.5	38.1	38.1	52.4	4.1	7	38.1	23.8	47.6	28.6	0.0	28.6	14.3	52.4	4.8	76.2	19.0	0.0	4.8	21
HC III	40.9	63.6	54.5	0.0	40.9	3.5	7	13.6	13.6	50.0	31.8	4.5	36.4	36.4	27.3	0.0	54.5	18.2	18.2	9.1	22
HC II	0.0	100.0	0.0	0.0	0.0	*	*	0.0	50.0	0.0	50.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	2
Government facilities																					
District hospital	85.7	100.0	57.1	85.7	28.6	*	7	14.3	42.9	14.3	42.9	0.0	42.9	14.3	42.9	0.0	100.0	0.0	0.0	0.0	7
HC IV	46.2	84.6	38.5	7.7	69.2	4.1	7	23.1	15.4	46.2	38.5	0.0	7.7	23.1	61.5	7.7	92.3	0.0	0.0	7.7	13
HC III	41.2	52.9	58.8	0.0	47.1	4.1	7	11.8	17.6	58.8	23.5	0.0	47.1	41.2	11.8	0.0	47.1	23.5	23.5	5.9	17
Non-government facilities																					
HC IV	62.5	100.0	37.5	87.5	25.0	*	7	62.5	37.5	50.0	12.5	0.0	62.5	0.0	37.5	0.0	50.0	50.0	0.0	0.0	8
HC III	40.0	100.0	40.0	0.0	20.0	*	7	20.0	0.0	20.0	60.0	20.0	0.0	20.0	80.0	0.0	80.0	0.0	0.0	20.0	5
HC II	0.0	100.0	0.0	0.0	0.0	*	*	0.0	50.0	0.0	50.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	0.0	0.0	2
Total	50.0	80.8	46.2	26.9	42.3	3.8	7	23.1	23.1	42.3	32.7	1.9	32.7	23.1	42.3	1.9	71.2	15.4	7.7	5.8	52

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.50 Availability of TB diagnosis services on the day of the visit

Among health care facilities with TB diagnosis services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
Ownership and facility type	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	30.7	69.3	8.2	91.8	0.0	3.4	7	37
Non-government	16.8	83.2	10.1	89.9	0.0	3.7	7	15
Facility type								
District hospital	39.9	60.1	19.7	80.3	0.0	3.5	7	8
HC IV	35.2	64.8	7.6	92.4	0.0	4.4	7	20
HC III	10.3	89.7	6.7	93.3	0.0	2.9	7	23
HC II	100.0	0.0	0.0	100.0	0.0	1.6	*	2
Government facilities								
District hospital	39.9	60.1	19.7	80.3	0.0	3.5	7	8
HC IV	53.6	46.4	0.0	100.0	0.0	4.3	7	12
HC III	11.7	88.3	8.7	91.3	0.0	2.5	7	18
HC II	*	*	*	*	*	*	*	0
Non-government facilities								
HC IV	6.4	93.6	19.5	80.5	0.0	6.3	7	8
HC III	5.5	94.5	0.0	100.0	0.0	3.7	7	5
HC II	100.0	0.0	0.0	100.0	0.0	1.6	*	2
Total	26.8	73.2	8.7	91.3	0.0	3.5	7	52

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.51 Availability of TB treatment service components

Percentage of facilities that offer various TB treatment program components including DOTS treatment, non-DOTS treatment and outreach, the median number of days of outreach services per month, median number of days per week services available, availability of partner organizations, and other service characteristics such as TB treatment guidelines, TB treatment visual aids and registers, by ownership and facility type, UHFS 2002

	Program components						TB treatment guidelines				TB treatment visual aid			Register				
Ownership and facility type	DOTS	Non-DOTS	Outreach	Median days per month of outreach	Median days per week services available	Partner organi-zation available	Yes, observed	Yes, not seen	None	Don't know	Yes, observed	Yes, not seen	None	Yes, observed	Yes, not seen	None	Don't know	Num-ber of facil-ities
Ownership																		
Government	86.4	66.7	47.0	2.8	7	10.6	30.3	28.8	39.4	1.5	48.5	15.2	36.4	77.3	10.6	7.6	4.5	66
Non-government	76.9	61.5	46.2	4.5	7	38.5	30.8	53.8	15.4	0.0	46.2	0.0	53.8	69.2	23.1	0.0	7.7	13
Facility type																		
District hospital	71.4	100.0	42.9	*	7	14.3	57.1	28.6	14.3	0.0	71.4	0.0	28.6	100.0	0.0	0.0	0.0	7
HC IV	84.6	65.4	57.7	3.0	7	34.6	38.5	38.5	23.1	0.0	50.0	7.7	42.3	80.8	11.5	3.8	3.8	26
HC III	84.6	66.7	38.5	4.1	7	5.1	25.6	30.8	41.0	2.6	46.2	15.4	38.5	74.4	12.8	5.1	7.7	39
HC II	100.0	28.6	57.1	2.0	7	0.0	0.0	28.6	71.4	0.0	28.6	28.6	42.9	42.9	28.6	28.6	0.0	7
Government facilities																		
District hospital	71.4	100.0	42.9	*	7	14.3	57.1	28.6	14.3	0.0	71.4	0.0	28.6	100.0	0.0	0.0	0.0	7
HC IV	82.4	70.6	58.8	2.3	7	23.5	41.2	29.4	29.4	0.0	47.1	11.8	41.2	88.2	0.0	5.9	5.9	17
HC III	88.6	65.7	40.0	4.1	7	5.7	25.7	28.6	42.9	2.9	48.6	17.1	34.3	74.3	14.3	5.7	5.7	35
HC II	100.0	28.6	57.1	2.0	7	0.0	0.0	28.6	71.4	0.0	28.6	28.6	42.9	42.9	28.6	28.6	0.0	7
Non-government facilities																		
HC IV	88.9	55.6	55.6	4.5	7	55.6	33.3	55.6	11.1	0.0	55.6	0.0	44.4	66.7	33.3	0.0	0.0	9
HC III	50.0	75.0	25.0	*	7	0.0	25.0	50.0	25.0	0.0	25.0	0.0	75.0	75.0	0.0	0.0	25.0	4
Total	84.8	65.8	46.8	3.3	7	15.2	30.4	32.9	35.4	1.3	48.1	12.7	39.2	75.9	12.7	6.3	5.1	79

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.52 Availability of TB treatment services on the day of the visit

Among health care facilities with TB treatment services, percentage with services available, percentage with specialized vs. integrated services, median number of staff, and median number of days service available per week, by ownership and facility type, UHFS 2002

Ownership and facility type	Services available		Special vs. integrated			Median number of staff	Median days available per week	Number of facilities
	Observed today	Reported today	Specialized service	Integrated service	Both			
Ownership								
Government	21.3	78.7	9.8	90.2	0.0	3.3	7	55
Non-government	43.2	56.8	3.6	67.8	28.7	5.4	7	15
Facility type								
District hospital	47.9	52.1	20.6	79.4	0.0	3.3	7	8
HC IV	30.0	70.0	3.3	90.5	6.2	4.5	7	23
HC III	23.2	76.8	11.0	80.5	8.5	2.9	7	34
HC II	0.0	100.0	0.0	100.0	0.0	2.2	7	7
Government facilities								
District hospital	47.9	52.1	20.6	79.4	0.0	3.3	7	8
HC IV	23.7	76.3	1.6	98.4	0.0	4.2	7	13
HC III	17.8	82.2	13.2	86.8	0.0	2.9	7	28
HC II	0.0	100.0	0.0	100.0	0.0	2.2	7	7
Non-government facilities								
HC IV	39.3	60.7	5.8	79.0	15.2	6.0	7	9
HC III	49.6	50.4	0.0	49.6	50.4	5.1	7	6
HC II	*	*	*	*	*	*	*	0
Total	25.9	74.1	8.5	85.4	6.0	3.7	7	70

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.53 In-service training of staff

Percentage of interviewed providers who reported receiving any in-service training in HIV/AIDS-related services in the 3 years preceding the survey, by type of training, ownership and facility type, UHFS 2002

Ownership and facility type	Any in-service training in past 3 years	Received in-service training in the 12 months preceding the survey							Received in-service training in the 13-35 months preceding the survey							Received no in-service training							Number of providers interviewed
		STI	VCT	MCT	OI	ART	Coun-seling, support	Other	STI	VCT	MCT	OI	ART	Coun-seling, support	Other	STI	VCT	MCT	OI	ART	Coun-seling, support	Other	
Ownership																							
Government	48.8	18.3	10.8	10.0	15.0	4.6	17.3	7.0	13.8	4.4	6.3	14.4	4.2	11.9	4.4	68.0	84.9	83.7	70.7	91.2	70.8	88.6	273
Non-government	48.8	22.5	11.2	8.5	19.4	3.2	26.7	4.2	9.5	5.8	5.3	9.1	0.0	13.0	1.0	68.0	83.0	86.2	71.5	96.8	60.3	94.8	94
Facility type																							
District hospital	84.0	52.4	42.1	23.5	51.7	16.0	62.6	0.0	7.9	15.8	23.7	25.7	23.7	0.0	0.0	39.7	42.1	52.8	22.6	60.4	37.4	100.0	19
HC IV	63.7	28.3	29.5	16.8	20.7	8.5	28.4	15.8	14.2	6.2	7.9	18.1	3.0	13.2	4.7	57.4	64.3	75.3	61.1	88.5	58.5	79.6	59
HC III	44.0	18.6	4.6	8.3	14.3	2.8	16.4	6.2	6.7	3.8	3.1	7.8	1.1	8.6	3.0	74.7	91.6	88.6	77.9	96.1	75.0	90.8	194
HC II	42.3	8.5	5.9	5.2	9.8	2.0	12.4	1.8	24.9	3.5	7.3	18.1	3.4	21.3	4.6	66.5	90.6	87.5	72.1	94.6	66.3	93.6	94
Government facilities																							
District hospital	84.0	52.4	42.1	23.5	51.7	16.0	62.6	0.0	7.9	15.8	23.7	25.7	23.7	0.0	0.0	39.7	42.1	52.8	22.6	60.4	37.4	100.0	19
HC IV	62.5	19.8	29.2	15.6	13.7	8.7	24.8	18.4	13.6	5.4	9.3	20.8	4.5	14.6	7.0	66.6	65.3	75.2	65.5	86.8	60.5	74.6	40
HC III	43.9	18.3	4.3	9.4	13.9	3.9	12.1	7.2	9.3	4.6	3.6	9.5	1.5	8.8	3.4	72.5	91.1	87.0	76.6	94.6	79.1	89.4	141
HC II	41.8	8.6	5.2	4.7	8.2	0.7	11.4	2.3	24.0	0.4	5.3	17.3	4.3	19.4	5.9	67.4	94.4	89.9	74.5	95.0	69.2	91.8	73
Non-government facilities																							
HC IV	66.2	45.7	30.1	19.2	34.9	8.1	35.5	10.3	15.6	7.7	5.2	12.7	0.0	10.2	0.0	38.7	62.2	75.6	52.3	91.9	54.3	89.7	19
HC III	44.3	19.6	5.4	5.4	15.2	0.0	27.8	3.5	0.0	1.8	1.8	3.2	0.0	8.1	1.8	80.4	92.8	92.9	81.6	100.0	64.1	94.7	53
HC II	43.8	8.1	8.1	6.7	15.6	6.7	15.6	0.0	28.2	14.4	14.4	21.0	0.0	28.2	0.0	63.6	77.5	78.9	63.4	93.3	56.2	100.0	21
Total	48.8	19.3	10.9	9.6	16.1	4.2	19.7	6.3	12.7	4.7	6.0	13.0	3.1	12.2	3.5	68.0	84.4	84.4	70.9	92.7	68.2	90.2	366

VCT = voluntary counseling and testing, MCT = mother-to-child transmission, OI = opportunistic infection, ART = anti-retroviral therapy

Table G.54 Availability of trained service providers

Percentage of interviewed providers who reported receiving in-service training in STI prevention, STI diagnosis and treatment, TB diagnosis and treatment, and the DOTS treatment strategy in the past 12 months, by ownership and facility type, UHFS 2002

Ownership and facility type	Respondent personally provides service		Received in-service training in the past 12 months					Number of providers interviewed
	Yes	No	STI prevention	STI etiology Dx and Rx	STI syndromic Dx and Rx	TB Dx and Rx	DOTS	
Ownership								
Government	20.7	79.3	94.1	7.7	15.8	12.4	13.6	273
Non-government	12.6	87.4	87.7	5.4	9.7	3.0	1.9	94
Facility type								
District hospital	35.6	64.4	85.4	21.5	27.2	19.3	12.7	19
HC IV	25.2	74.8	91.9	7.5	17.3	16.9	16.4	59
HC III	18.7	81.3	92.5	8.7	14.8	10.9	12.8	194
HC II	11.1	88.9	94.0	0.6	8.5	1.8	2.0	94
Government facilities								
District hospital	35.6	64.4	85.4	21.5	27.2	19.3	12.7	19
HC IV	20.9	79.1	96.8	6.6	15.0	18.3	19.9	40
HC III	22.0	78.0	92.4	9.7	18.1	15.0	17.7	141
HC II	14.3	85.7	98.0	0.8	8.8	2.3	2.6	73
Non-government facilities								
HC IV	33.9	66.1	82.0	9.2	21.8	14.2	9.2	19
HC III	9.8	90.2	92.7	6.2	6.2	0.0	0.0	53
HC II	0.0	100.0	80.0	0.0	7.5	0.0	0.0	21
Total	18.7	81.3	92.4	7.1	14.2	10.0	10.6	366

STI = sexually transmitted infection; Dx = diagnosis; Rx = treatment; TB = tuberculosis

Table G.55 Outside supervision of providers

Percent distribution of interviewed providers by whether received any outside supervision in the 6 months preceding the survey, and the frequency of visits during this period, by ownership and facility type, UHFS 2002

Ownership and facility type	Outside supervision in past 6 months		Total	Average number of times supervised in past 6 months	Number of providers interviewed
	Yes	No			
Ownership					
Government	88.9	11.1	100.0	3.7	273
Non-government	78.1	21.9	100.0	2.5	94
Facility type					
District hospital	58.6	41.4	100.0	3.1	19
HC IV	80.5	19.5	100.0	3.4	59
HC III	87.3	12.7	100.0	3.4	194
HC II	92.8	7.2	100.0	3.4	94
Government facilities					
District hospital	58.6	41.4	100.0	3.1	19
HC IV	88.1	11.9	100.0	4.0	40
HC III	89.2	10.8	100.0	3.7	141
HC II	96.6	3.4	100.0	3.6	73
Non-government facilities					
HC IV	64.9	35.1	100.0	2.1	19
HC III	82.4	17.6	100.0	2.5	53
HC II	79.5	20.5	100.0	2.6	21
Total	86.1	13.9	100.0	3.4	366

Table G.56 Reported laboratory capacity

Percent distribution of facilities by reported capacity to conduct an HIV, TB, or syphilis test, according to ownership and facility type, UHFS 2002

Ownership and facility type	Capacity to conduct at least one laboratory test		Total	Number of facilities
	Yes	No		
Ownership				
Government	26.9	73.1	100.0	171
Non-government	45.5	54.5	100.0	55
Facility type				
District hospital	97.2	2.8	100.0	8
HC IV	92.1	7.9	100.0	25
HC III	27.6	72.4	100.0	117
HC II	10.3	89.7	100.0	76
Government facilities				
District hospital	97.2	2.8	100.0	8
HC IV	87.6	12.4	100.0	16
HC III	26.2	73.8	100.0	86
HC II	2.5	97.5	100.0	61
Non-government facilities				
HC IV	100.0	0.0	100.0	9
HC III	31.3	68.7	100.0	31
HC II	41.3	58.7	100.0	15
Total	31.4	68.6	100.0	226

Table G.57 Qualifications of laboratory staff

Percent distribution of the laboratory staff interviewed on the day of the visit by type of certification, according to ownership and facility type, UHFS 2002

Ownership and facility type	Lab assistant certificate	Lab technician diploma	Lab technologist diploma or higher	Other	Missing/DK	Total	Number of facilities
Ownership							
Government	63.8	20.2	6.3	3.2	6.5	100.0	46
Non-government	45.6	33.2	7.2	14.0	0.0	100.0	25
Facility type							
District hospital	23.7	38.1	38.2	0.0	0.0	100.0	8
HC IV	36.7	57.0	6.4	0.0	0.0	100.0	23
HC III	79.5	4.3	0.9	6.0	9.3	100.0	32
HC II	60.8	0.0	0.0	39.2	0.0	100.0	8
Government facilities							
District hospital	23.7	38.1	38.2	0.0	0.0	100.0	8
HC IV	55.2	44.8	0.0	0.0	0.0	100.0	14
HC III	86.8	0.0	0.0	0.0	13.2	100.0	23
HC II	0.0	0.0	0.0	100.0	0.0	100.0	1
Non-government facilities							
HC IV	7.8	75.9	16.3	0.0	0.0	100.0	9
HC III	62.2	14.4	3.1	20.2	0.0	100.0	10
HC II	75.3	0.0	0.0	24.7	0.0	100.0	6
Total	57.4	24.8	6.6	7.0	4.2	100.0	71

Table G.58 Reported laboratory testing capacity

Percentage of facilities that reported the capacity to conduct an HIV test, a TB sputum test, and a syphilis test, by ownership and facility type, UHFS 2002

Ownership and facility type	HIV test	TB test	Syphilis test	Number of facilities
Ownership				
Government	9.2	25.0	15.3	171
Non-government	18.9	39.9	36.9	55
Facility type				
District hospital	79.4	97.2	97.2	8
HC IV	69.6	92.1	71.1	25
HC III	0.6	23.4	14.0	117
HC II	2.1	8.3	5.8	76
Government facilities				
District hospital	79.4	97.2	97.2	8
HC IV	55.5	87.6	54.8	16
HC III	0.6	22.4	11.2	86
HC II	0.0	2.5	0.0	61
Non-government facilities				
HC IV	94.6	100.0	100.0	9
HC III	0.7	26.2	22.0	31
HC II	10.2	31.5	29.1	15
Total	11.6	28.6	20.5	226

Table G.59 Availability of equipment for an HIV test

Among facilities that reported the capacity to run an HIV test, percentage with functioning refrigerator, by ownership and facility type, UHFS 2002

Ownership and facility type	Functioning refrigerator	Number of facilities
Ownership		
Government	98.6	16
Non-government	100.0	10
Facility type		
District hospital	100.0	6
HC IV	98.8	18
HC III	100.0	1
HC II	100.0	2
Government facilities		
District hospital	100.0	6
HC IV	97.6	9
HC III	100.0	1
Non-government facilities		
HC IV	100.0	9
HC III	100.0	0
HC II	100.0	2
Total	99.2	26

Table G.60 Availability of sufficient power source to run refrigerator

Among facilities that reported the capacity to run an HIV test and had a functioning refrigerator, percentage with a sufficient power source to run the refrigerator, by ownership and facility type, UHFS 2002

Ownership and facility type	Sufficient power source to run refrigerator	Number of facilities
Ownership		
Government	98.6	16
Non-government	100.0	10
Facility type		
District hospital	100.0	6
HC IV	100.0	17
HC III	70.4	1
HC II	100.0	2
Government facilities		
District hospital	100.0	6
HC IV	100.0	9
HC III	58.0	1
Non-government facilities		
HC IV	100.0	9
HC III	100.0	0
HC II	100.0	2
Total	99.2	26

Table G.61 Availability of trained laboratory staff

Percentage of facilities that had at least one staff person available on the day of the visit who had received in-service training in the past three years on conducting an HIV test, a TB test, and a syphilis test, by ownership and facility type, UHFS 2002

Ownership and facility type	HIV test	Number of facilities with capacity to offer HIV test	TB sputum test	Number of facilities with capacity to offer TB test	Syphilis test	Number of facilities with capacity to offer syphilis test
Ownership						
Government	59.0	16	63.6	43	37.0	26
Non-government	78.5	10	47.1	22	57.6	20
Facility type						
District hospital	74.8	6	52.1	8	23.3	8
HC IV	62.1	18	68.1	23	59.6	18
HC III	40.8	1	47.6	27	35.4	16
HC II	100.0	2	73.2	6	68.7	4
Government facilities						
District hospital	74.8	6	52.1	8	23.3	8
HC IV	48.2	9	73.6	14	65.5	9
HC III	58.0	1	58.1	19	21.5	10
HC II	*	0	100.0	1	*	0
Non-government facilities						
HC IV	76.7	9	59.5	9	53.8	9
HC III	0.0	0	22.4	8	55.5	7
HC II	100.0	2	64.8	5	68.7	4
Total	66.8	26	58.0	65	46.0	46

Note: An asterisk indicates that the figure is based on too few cases to show and has been suppressed.

Table G.62 Staff trained in HIV laboratory diagnosis

Percentage of interviewed laboratory staff who reported receiving in-service training in conducting various HIV tests in the past three years, by ownership and facility type, UHFS 2002

Ownership and facility type	Capillus	Bionor	Determine	Serocard	Hema-strip	Multispot/ Genne	Unigold	Other	Number of providers
Ownership									
Government	63.6	56.4	29.2	65.4	4.0	61.7	23.9	35.6	15
Non-government	88.8	11.1	43.7	80.9	11.2	35.2	21.3	16.6	13
Facility type									
District hospital	74.7	50.9	35.8	74.7	10.3	74.7	35.8	26.5	6
HC IV	77.4	22.6	41.2	72.4	9.7	52.7	26.3	33.8	15
HC III	50.9	49.1	43.6	50.9	0.0	36.3	7.3	20.1	4
HC II	100.0	48.9	0.0	100.0	0.0	0.0	0.0	0.0	3
Government facilities									
District hospital	74.7	50.9	35.8	74.7	10.3	74.7	35.8	26.5	6
HC IV	49.3	50.7	11.6	53.3	0.0	49.6	21.7	47.9	7
HC III	77.4	87.0	64.4	77.4	0.0	64.4	0.0	22.6	2
Non-government facilities									
HC IV	100.0	0.0	65.0	87.7	17.6	55.2	29.9	22.4	9
HC III	16.7	0.0	16.7	16.7	0.0	0.0	16.7	16.7	2
HC II	100.0	48.9	0.0	100.0	0.0	0.0	0.0	0.0	3
Total	75.4	35.1	36.0	72.7	7.4	49.2	22.7	26.6	28

Table G.63 Principal use of HIV test kits

Number of facilities that use various HIV test kits (Capillus, Bionor, Determine, Serocard, Hema-strip, Multispot/Genne, or Unigold) for primary, secondary or confirmatory HIV testing, by ownership and facility type, UHFS 2002

Type of test	Primary test	Secondary test	Confirmatory test
GOVERNMENT			
Capillus	10	0	0
Bionor	5	0	0
Determine	1	1	2
Serocard	0	4	6
Hema-strip	0	0	0
Multispot/Genne	0	0	4
Unigold	0	0	1
Other	0	1	2
NON-GOVERNMENT			
Capillus	10	0	0
Bionor	0	0	0
Determine	1	1	0
Serocard	1	3	2
Hema-strip	0	1	0
Multispot/Genne	0	0	4
Unigold	0	1	0
Other	0	1	1
DISTRICT HOSPITAL			
Capillus	4	0	0
Bionor	1	0	0
Determine	1	0	0
Serocard	0	3	1
Hema-strip	0	0	0
Multispot/Genne	0	0	3
Unigold	0	0	0
Other	0	1	0
HC IV			
Capillus	14	0	0
Bionor	4	0	0
Determine	1	2	2
Serocard	0	4	7
Hema-strip	0	0	0
Multispot/Genne	0	0	5
Unigold	0	1	1
Other	0	1	2
HC III			
Capillus	1	0	0
Bionor	0	0	0
Determine	0	0	0
Serocard	0	0	0
Hema-strip	0	1	0
Multispot/Genne	0	0	0
Unigold	0	0	0
Other	0	0	1
TOTAL			
Capillus	20	0	0
Bionor	5	0	0
Determine	2	2	2
Serocard	1	7	8
Hema-strip	0	1	0
Multispot/Genne	0	0	8
Unigold	0	1	1
Other	0	2	3

Table G.64 Availability of equipment for TB sputum test

Among facilities that reported the capacity to conduct TB sputum test, percentage that had a functioning microscope and glass slides, by ownership and facility type, UHFS 2002

Ownership and facility type	Functioning microscope	Glass slides	Number of facilities
Ownership			
Government	91.8	94.1	43
Non-government	98.3	98.3	22
Facility type			
District hospital	100.0	100.0	8
HC IV	100.0	97.9	23
HC III	85.8	91.2	27
HC II	100.0	100.0	6
Government facilities			
District hospital	100.0	100.0	8
HC IV	100.0	96.6	14
HC III	81.9	89.6	19
HC II	100.0	100.0	1
Non-government facilities			
HC IV	100.0	100.0	9
HC III	95.3	95.3	8
HC II	100.0	100.0	5
Total	94.0	95.5	65

Table G.65 Availability of equipment for a syphilis test

Among facilities that reported the capacity to conduct syphilis tests, percentage that had a functioning microscope and a syphilis test kit (VDRL, RPR, or TPHA), by ownership and facility type, UHFS 2002

Ownership and facility type	Functioning microscope	VDRL, RPR or TPHA kit	Number of facilities
Ownership			
Government	74.2	57.9	26
Non-government	82.7	75.0	20
Facility type			
District hospital	67.6	56.5	8
HC IV	77.8	75.7	18
HC III	85.9	57.8	16
HC II	66.4	66.4	4
Government facilities			
District hospital	67.6	56.5	8
HC IV	72.0	50.9	9
HC III	81.5	65.4	10
Non-government facilities			
HC IV	83.6	100.0	9
HC III	92.2	46.8	7
HC II	66.4	66.4	4
Total	77.9	65.4	46

Table G.66 Equipment disinfection

Percentage of facilities that practice equipment disinfection (soaking, sterilization) as aspects of infection control, status of observed sterilization equipment, and percentage of facilities with a copy of MoH infection control procedures, by ownership and facility type, UHFS 2002

Ownership and facility type	Soak equipment in disinfectant			Sterilize equipment							Observed sterilization equipment					Copy of MoH ICP present					Number of facilities
	Yes	No	DK/ Missing	Dry heat	Auto-clave	Steam	Boiling	Chemical	Other	None	Observed functional	Observed not functional	Reported functional	Reported not functional	Not available	Yes, MOH ICP seen	Yes, other ICP seen	Yes, MOH ICP not seen	No	Missing/DK	
Ownership																					
Government	84.3	15.2	0.6	1.7	5.6	11.8	91.0	11.2	0.0	2.2	52.2	10.7	23.0	7.3	6.7	6.7	0.0	6.7	82.6	3.9	178
Non-government	87.5	10.4	2.1	10.4	22.9	12.5	72.9	16.7	6.3	2.1	60.4	4.2	27.1	4.2	4.2	10.4	6.3	6.3	66.7	10.4	48
Facility type																					
District hospital	100.0	0.0	0.0	12.5	50.0	12.5	87.5	12.5	0.0	0.0	75.0	0.0	25.0	0.0	0.0	37.5	0.0	12.5	37.5	12.5	8
HC IV	86.7	13.3	0.0	6.7	36.7	23.3	76.7	16.7	3.3	0.0	60.0	13.3	20.0	6.7	0.0	10.0	0.0	3.3	73.3	13.3	30
HC III	83.9	15.3	0.8	1.6	3.2	8.9	87.9	12.9	0.8	1.6	51.6	8.1	27.4	5.6	7.3	4.8	1.6	6.5	83.1	4.0	124
HC II	84.4	14.1	1.6	4.7	3.1	12.5	90.6	9.4	1.6	4.7	53.1	10.9	18.8	9.4	7.8	7.8	1.6	7.8	79.7	3.1	64
Government facilities																					
District hospital	100.0	0.0	0.0	12.5	50.0	12.5	87.5	12.5	0.0	0.0	75.0	0.0	25.0	0.0	0.0	37.5	0.0	12.5	37.5	12.5	8
HC IV	81.0	19.0	0.0	0.0	19.0	14.3	90.5	14.3	0.0	0.0	61.9	19.0	9.5	9.5	0.0	4.8	0.0	4.8	81.0	9.5	21
HC III	85.6	14.4	0.0	0.0	2.1	9.3	90.7	11.3	0.0	2.1	48.5	9.3	26.8	7.2	8.2	5.2	0.0	5.2	86.6	3.1	97
HC II	80.8	17.3	1.9	3.8	0.0	15.4	92.3	9.6	0.0	3.8	51.9	11.5	21.2	7.7	7.7	5.8	0.0	9.6	82.7	1.9	52
Non-government facilities																					
HC IV	100.0	0.0	0.0	22.2	77.8	44.4	44.4	22.2	11.1	0.0	55.6	0.0	44.4	0.0	0.0	22.2	0.0	0.0	55.6	22.2	9
HC III	77.8	18.5	3.7	7.4	7.4	7.4	77.8	18.5	3.7	0.0	63.0	3.7	29.6	0.0	3.7	3.7	7.4	11.1	70.4	7.4	27
HC II	100.0	0.0	0.0	8.3	16.7	0.0	83.3	8.3	8.3	8.3	58.3	8.3	8.3	16.7	8.3	16.7	8.3	0.0	66.7	8.3	12
Total	85.0	14.2	0.9	3.5	9.3	11.9	87.2	12.4	1.3	2.2	54.0	9.3	23.9	6.6	6.2	7.5	1.3	6.6	79.2	5.3	226

ICP = Infection control protocol

Table G.67 Availability of electricity, water and latrines for infection control

Percentage of facilities with selected provisions for infection control (availability of electricity, water, and latrines), by ownership and facility type, UHFS 2002

Ownership and facility type	Electricity for sterilization					Availability of electricity (days/week)			Backup generator		Water present			Latrine functional		Number of facilities
	Yes, outside	Yes, solar	Yes, hydro	Yes, generator	No	Always available	Average number of days not available past week	Not applicable	Functions, fuel present	Not applicable	Yes, water onsite	Source onsite, no water	Missing	Yes, observed	Yes, not seen	
Ownership																
Government	1.1	0.6	10.7	3.4	86.5	12.9	0.0	87.1	6.2	85.4	60.7	4.5	0.6	91.0	1.1	178
Non-government	8.3	2.1	27.1	6.3	60.4	35.4	2.1	62.5	20.8	62.5	83.3	6.3	0.0	97.9	2.1	48
Facility type																
District hospital	12.5	12.5	50.0	25.0	25.0	75.0	0.0	25.0	75.0	25.0	75.0	0.0	12.5	87.5	0.0	8
HC IV	10.0	0.0	46.7	13.3	40.0	60.0	0.0	40.0	33.3	40.0	83.3	6.7	0.0	93.3	3.3	30
HC III	0.8	0.8	7.3	0.8	90.3	8.1	0.8	91.1	2.4	89.5	69.4	6.5	0.0	96.8	1.6	124
HC II	1.6	0.0	7.8	3.1	89.1	9.4	0.0	90.6	3.1	89.1	48.4	1.6	0.0	84.4	0.0	64
Government facilities																
District hospital	12.5	12.5	50.0	25.0	25.0	75.0	0.0	25.0	75.0	25.0	75.0	0.0	12.5	87.5	0.0	8
HC IV	4.8	0.0	42.9	9.5	52.4	47.6	0.0	52.4	14.3	52.4	76.2	9.5	0.0	90.5	4.8	21
HC III	0.0	0.0	4.1	1.0	94.8	5.2	0.0	94.8	1.0	92.8	67.0	5.2	0.0	96.9	1.0	97
HC II	0.0	0.0	3.8	1.9	94.2	3.8	0.0	96.2	1.9	94.2	40.4	1.9	0.0	80.8	0.0	52
Non-government facilities																
HC IV	22.2	0.0	55.6	22.2	11.1	88.9	0.0	11.1	77.8	11.1	100.0	0.0	0.0	100.0	0.0	9
HC III	3.7	3.7	18.5	0.0	74.1	18.5	3.7	77.8	7.4	77.8	77.8	11.1	0.0	96.3	3.7	27
HC II	8.3	0.0	25.0	8.3	66.7	33.3	0.0	66.7	8.3	66.7	83.3	0.0	0.0	100.0	0.0	12
Total	2.7	0.9	14.2	4.0	81.0	17.7	0.4	81.9	9.3	80.5	65.5	4.9	0.4	92.5	1.3	226

Table G.68 Infection control amenities in service delivery area

Percentage of facilities with sharps container, disposable needles/syringes, soap, water for handwashing, disinfectant for soaking equipment, and capacity for high-level disinfection available on the day of the survey, by ownership and facility type, UHFS 2002

Ownership and facility type	Sharps container	Syringes	Handwashing items (soap)	Water for handwashing	Disinfectant	High-level disinfection capacity	All items needed for infection control	Number of facilities
Ownership								
Government	51.0	53.6	73.4	79.2	84.9	99.2	24.0	171
Non-government	41.7	95.4	77.1	79.9	85.3	100.0	31.0	55
Facility type								
District hospital	56.9	61.6	100.0	100.0	100.0	100.0	37.7	8
HC IV	72.6	64.3	73.2	91.1	93.8	100.0	34.4	25
HC III	52.5	64.7	76.1	76.1	84.0	99.1	29.2	117
HC II	34.1	62.3	69.4	78.4	82.2	99.4	16.2	76
Government facilities								
District hospital	56.9	61.6	100.0	100.0	100.0	100.0	37.7	8
HC IV	77.9	56.6	70.7	86.1	90.3	100.0	39.9	16
HC III	59.5	52.4	78.2	78.8	87.6	98.8	30.7	86
HC II	30.9	53.4	63.9	75.3	77.7	99.3	8.4	61
Non-government facilities								
HC IV	63.1	77.9	77.8	100.0	100.0	100.0	24.6	9
HC III	32.7	99.3	70.1	68.4	73.6	100.0	25.0	31
HC II	46.9	98	90.9	90.9	100.0	100.0	46.9	15
Total	48.7	63.8	74.3	79.4	85.0	99.4	25.7	226

Table G.69 Laboratory facilities with infection control commodities

Among laboratory facilities that reported the capacity to conduct any of the laboratory tests for which data were collected, percentage with sharps container, disposable syringes, waste receptacle with lid and liner, handwashing soap and water, by ownership and facility type, UHFS 2002

Ownership and facility type	Sharps container	Syringes	Waste receptacle	Handwashing items (soap)	Water for handwashing	All items needed for infection control	Number of facilities
Ownership							
Government	46.6	58.0	31.8	84.1	82.5	7.1	46
Non-government	61.1	70.7	44.8	78.8	88.6	25.4	25
Facility type							
District hospital	78.4	83.4	45.3	100.0	100.0	40.3	8
HC IV	55.9	65.8	35.2	94.4	100.0	14.2	23
HC III	36.5	55.3	29.8	69.3	66.2	5.2	32
HC II	76.1	61.7	58.3	82.2	100.0	20.0	8
Government facilities							
District hospital	78.4	83.4	45.3	100.0	100.0	40.3	8
HC IV	41.6	54.4	25.6	94.4	100.0	1.5	14
HC III	35.5	55.6	26.7	71.2	64.4	0.0	23
HC II	100.0	0.0	100.0	100.0	100.0	0.0	1
Non-government facilities							
HC IV	78.3	83.7	50.3	94.2	100.0	34.0	9
HC III	38.7	54.6	37.2	64.7	70.2	17.6	10
HC II	70.5	76.3	48.4	78.0	100.0	24.7	6
Total	51.7	62.4	36.4	82.2	84.6	13.5	71

Table G.70 Sharps management and disposal practices

Percentage of laboratory facilities that break, bend, separate, disinfect or do nothing to needle and syringe before disposal; dispose in sharps containers; reuse sharps containers; store before final disposal (secure or not secure); and the final disposal method, by ownership and facility type, UHFS 2002

	Practice before disposal						Disposal		Re-use of sharps containers				Sharps containers storage before disposal					Disposal method for used sharps containers										
Ownership and facility type	Break	Bend	Separate	Disinfect	Nothing	Other	In sharps container	In non-sharps container	Yes	No	Never use containers	Don't know	Secure, limited access	Secure, open access	Not secure	Don't know	Missing	Burn in incinerator	Burn in open pit	Burn and bury	Buried	Open pit	Pit latrine	Covered placenta pit	Municipal dump	Special disposal	Other	Number of facilities
Ownership																												
Government	1.1	0.6	58.4	36.5	19.1	23.0	40.4	55.6	19.1	23.0	0.6	57.3	19.7	12.9	7.9	2.2	57.3	0.6	20.8	2.2	1.1	8.4	12.4	3.4	0.6	0.6	6.2	178
Non-government	0.0	2.1	60.4	35.4	29.2	8.3	41.7	52.1	16.7	27.1	0.0	56.3	20.8	12.5	8.3	2.1	56.3	10.4	20.8	4.2	2.1	4.2	6.3	8.3	0.0	0.0	2.1	48
Facility type																												
District hospital	0.0	0.0	87.5	37.5	12.5	25.0	37.5	62.5	25.0	12.5	0.0	62.5	25.0	12.5	0.0	0.0	62.5	12.5	12.5	12.5	0.0	12.5	12.5	0.0	12.5	0.0	0.0	8
HC IV	3.3	0.0	46.7	30.0	23.3	20.0	53.3	46.7	16.7	36.7	0.0	46.7	20.0	13.3	16.7	3.3	46.7	13.3	23.3	0.0	0.0	10.0	3.3	3.3	0.0	3.3	16.7	30
HC III	0.8	0.0	62.1	37.1	21.0	17.7	42.7	53.2	20.2	24.2	0.0	55.6	21.0	14.5	5.6	3.2	55.6	0.8	22.6	1.6	2.4	8.9	8.1	7.3	0.0	0.0	4.0	124
HC II	0.0	3.1	54.7	37.5	21.9	23.4	31.3	60.9	15.6	18.8	1.6	64.1	17.2	9.4	9.4	0.0	64.1	0.0	17.2	4.7	0.0	3.1	20.3	0.0	0.0	0.0	3.1	64
Government facilities																												
District hospital	0.0	0.0	87.5	37.5	12.5	25.0	37.5	62.5	25.0	12.5	0.0	62.5	25.0	12.5	0.0	0.0	62.5	12.5	12.5	12.5	0.0	12.5	12.5	0.0	12.5	0.0	0.0	8
HC IV	4.8	0.0	47.6	33.3	19.0	23.8	52.4	47.6	14.3	38.1	0.0	47.6	14.3	19.0	19.0	0.0	47.6	0.0	28.6	0.0	0.0	14.3	4.8	4.8	0.0	4.8	19.0	21
HC III	1.0	0.0	60.8	37.1	18.6	20.6	42.3	53.6	20.6	23.7	0.0	55.7	19.6	14.4	6.2	4.1	55.7	0.0	21.6	1.0	2.1	9.3	9.3	5.2	0.0	0.0	5.2	97
HC II	0.0	1.9	53.8	36.5	21.2	26.9	32.7	61.5	17.3	17.3	1.9	63.5	21.2	7.7	7.7	0.0	63.5	0.0	17.3	3.8	0.0	3.8	21.2	0.0	0.0	0.0	3.8	52
Non-government facilities																												
HC IV	0.0	0.0	44.4	22.2	33.3	11.1	55.6	44.4	22.2	33.3	0.0	44.4	33.3	0.0	11.1	11.1	44.4	44.4	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	9
HC III	0.0	0.0	66.7	37.0	29.6	7.4	44.4	51.9	18.5	25.9	0.0	55.6	25.9	14.8	3.7	0.0	55.6	3.7	25.9	3.7	3.7	7.4	3.7	14.8	0.0	0.0	0.0	27
HC II	0.0	8.3	58.3	41.7	25.0	8.3	25.0	58.3	8.3	25.0	0.0	66.7	0.0	16.7	16.7	0.0	66.7	0.0	16.7	8.3	0.0	0.0	16.7	0.0	0.0	0.0	0.0	12
Total	0.9	0.9	58.8	36.3	21.2	19.9	40.7	54.9	18.6	23.9	0.4	57.1	19.9	12.8	8.0	2.2	57.1	2.7	20.8	2.7	1.3	7.5	11.1	4.4	0.4	0.4	5.3	226

Table G.71 Contaminated waste management and disposal practices

Percentage of facilities that practice selected aspects of infection control and waste disposal, by ownership and facility type, UHFS 2002

	Final disposal of sharps containers					Contaminated waste storage prior to disposal						Potentially contaminated waste disposal					Final disposal of contaminated waste					Infection control co-ordinator and committee							
Ownership and facility type	No waste visible	Waste visible, not protected	Waste visible, protected	Not inspected	Missing	Firmly covered bin	Open bin, protected	Other protected area	Other non-protected area	Other	Missing	Burn in incinerator	Burn in open pit	Burn and bury	Buried	Open pit	Waste visible, not protected	Waste visible, protected	No waste visible	Not inspected	Missing	Co-ordinator exists	Yes, committee, documents seen	Yes, committee, documents not seen	Yes, committee, not met in 3 months	No co-ordinator	No committee	Don't know	Number of facilities
Ownership																													
Government	17.4	19.1	3.4	0.6	59.6	22.5	29.8	7.9	31.5	7.9	0.6	1.1	54.5	10.1	0.0	33.7	59.6	14.6	22.5	3.4	0.0	15.7	2.2	2.2	1.1	68.5	78.1	2.8	178
Non-government	18.8	16.7	2.1	2.1	60.4	41.7	25.0	6.3	22.9	2.1	2.1	14.6	56.3	10.4	6.3	18.8	50.0	14.6	27.1	4.2	4.2	14.6	2.1	2.1	0.0	68.8	70.8	8.3	48
Facility type																													
District hospital	0.0	37.5	0.0	0.0	62.5	25.0	25.0	12.5	25.0	12.5	0.0	12.5	50.0	0.0	0.0	75.0	75.0	0.0	12.5	12.5	0.0	75.0	25.0	12.5	25.0	0.0	12.5	0.0	8
HC IV	30.0	10.0	0.0	3.3	56.7	26.7	36.7	6.7	20.0	6.7	3.3	20.0	36.7	16.7	3.3	36.7	50.0	16.7	26.7	3.3	3.3	20.0	3.3	0.0	0.0	66.7	70.0	10.0	30
HC III	16.9	21.0	4.0	0.0	58.1	28.2	29.8	8.1	29.0	4.8	0.0	0.8	63.7	9.7	0.8	25.8	59.7	16.1	21.8	2.4	0.0	15.3	1.6	1.6	0.0	66.9	76.6	4.8	124
HC II	15.6	15.6	3.1	1.6	64.1	23.4	23.4	6.3	35.9	9.4	1.6	1.6	46.9	9.4	1.6	31.3	54.7	12.5	26.6	4.7	1.6	6.3	0.0	3.1	0.0	81.3	87.5	0.0	64
Government facilities																													
District hospital	0.0	37.5	0.0	0.0	62.5	25.0	25.0	12.5	25.0	12.5	0.0	12.5	50.0	0.0	0.0	75.0	75.0	0.0	12.5	12.5	0.0	75.0	25.0	12.5	25.0	0.0	12.5	0.0	8
HC IV	33.3	9.5	0.0	4.8	52.4	28.6	38.1	4.8	19.0	9.5	0.0	0.0	42.9	9.5	0.0	47.6	57.1	9.5	28.6	4.8	0.0	19.0	4.8	0.0	0.0	66.7	71.4	9.5	21
HC III	16.5	20.6	4.1	0.0	58.8	24.7	32.0	8.2	29.9	5.2	0.0	1.0	61.9	10.3	0.0	26.8	59.8	17.5	20.6	2.1	0.0	15.5	1.0	1.0	0.0	67.0	79.4	3.1	97
HC II	15.4	17.3	3.8	0.0	63.5	15.4	23.1	7.7	40.4	11.5	1.9	0.0	46.2	11.5	0.0	34.6	57.7	13.5	25.0	3.8	0.0	5.8	0.0	3.8	0.0	82.7	88.5	0.0	52
Non-government facilities																													
HC IV	22.2	11.1	0.0	0.0	66.7	22.2	33.3	11.1	22.2	0.0	11.1	66.7	22.2	33.3	11.1	11.1	33.3	33.3	22.2	0.0	11.1	22.2	0.0	0.0	0.0	66.7	66.7	11.1	9
HC III	18.5	22.2	3.7	0.0	55.6	40.7	22.2	7.4	25.9	3.7	0.0	0.0	70.4	7.4	3.7	22.2	59.3	11.1	25.9	3.7	0.0	14.8	3.7	3.7	0.0	66.7	66.7	11.1	27
HC II	16.7	8.3	0.0	8.3	66.7	58.3	25.0	0.0	16.7	0.0	0.0	8.3	50.0	0.0	8.3	16.7	41.7	8.3	33.3	8.3	8.3	8.3	0.0	0.0	0.0	75.0	83.3	0.0	12
Total	17.7	18.6	3.1	0.9	59.7	26.5	28.8	7.5	29.6	6.6	0.9	4.0	54.9	10.2	1.3	30.5	57.5	14.6	23.5	3.5	0.9	15.5	2.2	2.2	0.9	68.6	76.5	4.0	226

Table G.72 VCT services

Among facilities offering VCT services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer VCT services							Number of facilities
	Trained service provider	Trained laboratory technician	Trained staff in service and lab	HIV test kit available	Functioning fridge with power	Both commodities and equipment	All components	
Ownership								
Government	100.0	45.9	45.9	61.8	85.5	61.8	26.1	12
Non-government	90.8	58.0	53.4	61.6	75.7	49.5	40.3	11
Facility type								
District hospital	100.0	61.1	61.1	38.9	100.0	38.9	0.0	4
HC IV	93.1	64.8	61.3	77.1	100.0	77.1	51.4	15
HC III	100.0	0.0	0.0	43.6	0.0	0.0	0.0	3
HC II	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Government facilities								
District hospital	100.0	61.1	61.1	38.9	100.0	38.9	0.0	4
HC IV	100.0	49.1	49.1	92.5	100.0	92.5	49.1	7
HC III	100.0	0.0	0.0	0.0	0.0	0.0	0.0	2
Non-government facilities								
HC IV	87.8	76.7	70.6	65.4	100.0	65.4	53.2	9
HC III	100.0	0.0	0.0	100.0	0.0	0.0	0.0	1
HC II	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	95.6	51.7	49.5	61.7	80.8	55.9	32.9	24

Table G.73 PMTCT services

Among facilities offering PMTCT services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer PMTCT services							Number of facilities
	Trained service provider	Trained laboratory technician	Trained staff in service and lab	HIV test kit available	Functioning fridge with power	Both commodities and equipment	All components	
Ownership								
Government	74.7	7.3	7.3	7.3	12.4	7.3	7.3	10
Non-government	43.9	64.3	8.2	8.2	64.3	8.2	8.2	3
Facility type								
HC IV	61.3	62.7	24.0	24.0	75.4	24.0	24.0	4
HC III	71.1	0.0	0.0	0.0	0.0	0.0	0.0	8
Government facilities								
HC IV	100.0	32.9	32.9	32.9	55.7	32.9	32.9	2
HC III	67.5	0.0	0.0	0.0	0.0	0.0	0.0	8
Non-government facilities								
HC IV	12.7	100.0	12.7	12.7	100.0	12.7	12.7	2
HC III	100.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	68.0	19.7	7.5	7.5	23.7	7.5	7.5	12

Table G.74 Opportunistic infection services

Among facilities offering OI treatment services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer OI services: Trained service provider	Commodity available[1]	All components	Number of facilities
Ownership				
Government	66.0	68.5	45.5	105
Non-government	67.6	89.8	62.2	37
Facility type				
District hospital	95.0	84.3	79.4	6
HC IV	73.1	85.7	59.8	21
HC III	66.5	78.4	52.0	72
HC II	58.8	59.6	37.3	42
Government facilities				
District hospital	95.0	84.3	79.4	6
HC IV	60.9	78.4	40.9	14
HC III	65.4	72.2	47.0	54
HC II	63.4	54.1	38.2	30
Non-government facilities				
HC IV	96.9	100	96.9	7
HC III	69.7	97.1	66.8	18
HC II	47.2	73.1	35	12
Total	66.4	74.1	49.9	142

[1] Sufficient commodity is defined as at least one tablet of any medication in the category.

Table G.75 STI services

Among facilities offering STI treatment services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer STI services: Trained service provider	Commodity available[1]	Trained service provider and commodities	Laboratory capacity	Trained laboratory technician	Equipment available	All components	Number of facilities
Ownership								
Government	72.5	80.1	59.4	16.0	6.2	7.1	1.7	115
Non-government	68.2	87.7	59.7	39.9	21.6	29.1	3.2	47
Facility type								
District hospital	76.1	84.7	60.8	96.5	28.4	28.4	28.4	6
HC IV	65.8	91.3	58.2	77.3	43.0	50.7	7.0	21
HC III	79.4	81.3	65.3	12.2	3.9	7.6	0.3	84
HC II	59.3	79.8	50.1	8.8	6.1	5.9	0.0	50
Government facilities								
District hospital	76.1	84.7	60.8	96.5	28.4	28.4	28.4	6
HC IV	68.2	84.8	54.7	60.2	34.9	26	0.0	12
HC III	78.9	74.8	60.4	8.7	1.8	5.6	0.4	58
HC II	63.3	85.9	59.1	0.0	0.0	0.0	0.0	38
Non-government facilities								
HC IV	62.7	100.0	62.7	100.0	53.8	83.6	16.4	9
HC III	80.4	96.0	76.4	20.4	8.7	12.3	0.0	26
HC II	46.9	61.1	22.6	36.1	24.8	24.0	0.0	12
Total	71.2	82.3	59.5	23.0	10.7	13.5	2.2	162

[1] Sufficient commodity is defined as at least one tablet of any medication in the category.

Table G.76 TB diagnostic services

Among facilities offering TB diagnostic services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer TB diagnostic services					Number of facilities
	Trained service provider	Trained laboratory technician	Trained staff in service and lab	Equipment available	All components	
Ownership						
Government	79.8	60.3	40.9	73.2	33.3	37
Non-government	44.2	28.6	15.7	97.4	15.7	15
Facility type						
District hospital	100.0	52.1	52.1	100.0	52.1	8
HC IV	58.1	72.8	41.1	97.5	38.6	20
HC III	67.4	36.8	24.1	57.5	14.1	23
HC II	100.0	0.0	0.0	100.0	0.0	2
Government facilities						
District hospital	100.0	52.1	52.1	100.0	52.1	8
HC IV	61.6	86.4	50.6	95.9	46.4	12
HC III	83.4	46.3	29.7	46.7	16.7	18
Non-government facilities						
HC IV	52.5	51.5	26.4	100.0	26.4	8
HC III	15.2	5.5	5.5	93.0	5.5	5
HC II	100.0	0.0	0.0	100.0	0.0	2
Total	69.7	51.3	33.7	80.0	28.3	52

Table G.77 TB treatment services

Among facilities offering TB treatment services, percentage meeting various criteria to offer services, by ownership and facility type, UHFS 2002

Ownership and facility type	Components of capacity to offer TB treatment services			Number of facilities
	Trained service provider	Commodity available	All components	
Ownership				
Government	71.1	59.6	46.4	55
Non-government	50.1	69.3	40.0	15
Facility type				
District hospital	95.0	47.0	42.0	8
HC IV	76.1	77.3	62.2	23
HC III	62.1	61.7	42.9	34
HC II	24.3	23.9	0.0	7
Government facilities				
District hospital	95.0	47.0	42.0	8
HC IV	74.9	84.2	62.7	13
HC III	73.6	59.5	50.5	28
HC II	24.3	23.9	0.0	7
Non-government facilities				
HC IV	77.9	67.3	61.5	9
HC III	5.3	72.5	5.3	6
Total	66.6	61.6	45.0	70

Appendix H

Collaborating Agencies

DELIVER

DELIVER is a USAID-funded project being implemented by John Snow, Inc (JSI). The mission of DELIVER is to strengthen the supply chains of health and family planning programs in developing countries to ensure the availability of critical health products for customers. DELIVER's motto—No Product? No Program—is a reminder that without a full supply of products, health programs cannot operate.

To ensure the full supply of essential products improvements must be made to the supply chains serving developing country health systems. DELIVER improves health program supply chains by strengthening logistics management information systems, streamlining distribution, and enhancing forecasting and procurement planning. DELIVER also helps policymakers and donor agencies understand the critical role logistics and supplies play in health programs.

DELIVER's five core objectives are to improve

- Logistics systems, including distribution, forecasting, procurement, management information systems, and evaluation.
- Human capacity in logistics, including training and other performance improvement strategies for both individuals and organizations.
- Resource mobilization for contraceptive security, including building policy commitment, coordinating donor efforts, exploiting health sector reform, and developing local leadership.
- Adoption and adaptation of advances in logistics (from the commercial sector), including operations and analytical research.
- USAID's contraceptive procurement system, including estimating requirements for USAID products and operating and upgrading USAID's central commodity management information system (NEWVERN).

The project's one strategic objective is to increase the availability of contraceptives and other essential health products at service delivery points. Conducting facility based surveys that measure commodity availability is a key area of technical assistance. Programs can achieve "security" for essential products if they estimate their product needs accurately, identify adequate financing, conduct timely procurement, and deliver the goods reliably to all customers at service outlets.

DELIVER in Uganda

In early 2000, DELIVER worked with USAID and the MoH to develop a strategic work plan to improve the logistics system in Uganda. This led to the recommendation of placing a resident logistics advisor in country for a minimum of two years. Shortly following that decision, the DELIVER team carried out a qualitative logistics system assessment. In October of 2001, DELIVER placed a resident advisor at the MoH in Kampala. The focus of the first year has centered around improvements in the health commodity logistics system at the national level. The DELIVER Resident Advisor has been an integral partner in the improvements and related changes taking place. Targeted areas of improvement include the development of a national essential drug policy, securing funding from international donor sources, establishing a lo-

gistics management information system, averting national level stock outs, and STI drug quantification. In addition to the work of the resident advisor, DELIVER has provided short-term technical assistance in the areas of drug quantification, assessment of NMS's capacity to use bar coding, HIV test kit standardization and this baseline facility-based survey on HIV/AIDS services, commodity availability and logistics systems performance.

The AIM District Programme

Uganda has made great strides in combating the AIDS epidemic. Although Uganda has made significant progress, there continue to be numerous challenges; HIV and sexually transmitted infection services are not uniformly available throughout the country. In response to this and in consultation with the MoH, Uganda AIDS Commission, international agencies, NGOs, CBOs and those affected by HIV/AIDS, the United States Agency for International Development (USAID) and the Centers for Disease Control and Prevention (CDC) jointly designed and funded a five-year initiative known as the AIDS/HIV Integrated Model District Programme (AIM), implemented by JSI Research and Training.

AIM's goal is to support men, women and children in selected districts in Uganda to access and utilize appropriate, affordable and quality HIV/AIDS prevention, care and support services.

The program focuses on strengthening the capacity of governmental, non-governmental and community and faith-based organizations along with the private sector, to plan, implement, manage and provide services at the national, district and sub-district level. Interventions will focus on increasing the level and quality of integration of HIV/AIDS prevention, care and support services including primary prevention, clinical, community and home-based care, social support services including orphans, vulnerable children and adolescents. Unique characteristics of the AIM program include the implementation of activities in selected districts that can be linked to assist the integration of other sectors such as tuberculosis, malaria, orphan care, education, youth and the importance of capacity building and training of existing service providers and the direct provision of grants to those agencies that are part of the district strategic HIV/AIDS plan.

Following a review and assessment process, stakeholders recommended specific districts to be selected for the AIM program. These were reviewed by the MoH and Uganda AIDS Commission. The final list of districts was agreed and approved by the Government of Uganda, USAID and CDC at the end of February 2002. On March 26th, 2002 the AIDS/HIV Integrated Model District Program (AIM) was successfully launched. Of the 16 selected districts, 10 were chosen for Phase I of the AIM program with the remaining 6 starting in Phase II as resources are allocated. Phase I districts are Lira, Pader, Apac, Rukungiri, Bushenyi, Ntungamo, Katakwi, Soroti, Kumi, and Tororo, and Phase II districts will include Mubende, Kibaale, Pallisa, Nebbi, Arua, and Yumbe.

Overall project results will be evaluated based on key indicators directed towards assessing the quality and breadth of services, to include community perception and knowledge of program activities and HIV/AIDS. The process will also be measured on integration, partnership and collaborative effectiveness. It is the combination of this qualitative/quantitative assessment and analysis that will help AIM and its partners decide if the project is truly a "model" that can be replicated effectively across Uganda and other countries.

ORC Macro and the Service Provision Assessment

As a partner on the Uganda Health Facilities Survey 2002, ORC Macro brings expertise with assessment of quality and access to care through its experience with the Service Provision Assessment (SPA). This is a tool that addresses information needs in health care delivery systems in developing countries.

Although a great deal of time, effort, and money has been expended to develop facilities and services that focus on improving the health of mothers and children, the results that were hoped for are often not seen. Usually the explanations cite a lack of trained health workers or even the need for new interventions, under the assumption that previously introduced interventions are not effective. However, there is rarely independently verified information available to show 1) how well the activities and interventions that were developed are being carried out and 2) whether all of the components necessary to carry out activities and provide interventions have been and continue to be consistently available at the facilities. To make appropriate recommendations and changes in policies and programs, it will be necessary to find out whether the procedures and activities theoretically in place are really being performed as they were intended to be. If not, it will be necessary to find out where the weaknesses are before they can be amended.

The Uganda Health Facilities Survey 2002 was designed to address some of these issues and patterned in part after the SPA developed by ORC Macro. The SPA is a survey that was designed to extract information about the general performance of outpatient facilities that serve pediatric, maternal, and reproductive health needs. Drawing on a representative sample of private and public facilities, the survey gathers information that points up the strengths and weaknesses of the service delivery environment. The information that the SPA elicits on health services at the level of the provider may help policy makers and program administrators develop effective strategies to improve the utilization and coverage of services and prioritize resources in ways that will ensure better health outcomes.

CDC-Uganda

The Centers for Disease Control and Prevention (CDC) is one of the world's leading public health agencies; its mission is to protect people's health and safety. Although the majority of CDC activities take place in the United States, it also works with many countries around the world. CDC began working on HIV/AIDS in Uganda in 1991. During 1999-2001, CDC expanded its activities in Uganda as increased funding became available. Today, CDC-Uganda has a large portfolio of operational research and programs, 150 staff, and an annual budget of $12 million.

CDC-Uganda's mission statement is to work with Ugandan and international partners to develop, evaluate and support effective implementation of interventions to prevent HIV and related illnesses and improve care and support of persons with HIV/AIDS.

To pursue this mission, CDC-Uganda focuses on four main areas: 1) Capacity building, training, and infrastructure development; 2) Evaluation, technical, and financial assistance for existing programs; 3) Operational research; and 4) Applied epidemiology, behavioral, and laboratory research.

The majority of CDC-Uganda's work is done as part of the Global AIDS Program (GAP), a CDC program that began in 1999 and is currently working in 24 countries. GAP has three goals: reduce HIV transmission through prevention of sexual, mother-to-child, and blood-borne infection; improve community and home-based care and treatment of HIV/AIDS and other related sexually transmitted and opportunistic infections; and strengthen the capacity of countries to collect and use surveillance data and to manage national HIV/AIDS programs.

CDC-Uganda's work is based on priorities identified in the National Strategic Framework for HIV/AIDS developed by the Uganda AIDS Commission, Ministry of Health, and other stakeholders for the period 2001-2006. CDC-Uganda collaborates with a number of institutions, both national and international, in a coordinated effort to reduce the burden of HIV/AIDS in Uganda. Critical to CDC-Uganda's work is the HIV/AIDS effort and expertise already established by the Ministry of Health, the Uganda Virus Research Institute, and Ugandan non-governmental organizations. CDC funds programs with both the Ugandan government and a number of non-governmental organizations. Key to CDC-

Ugandan government and a number of non-governmental organizations. Key to CDC-Uganda's work is that all funding comes with resident, in-country technical assistance.

USAID/Uganda

USAID has been working in Uganda since 1962. In June 2000 the USAID mission in Uganda initiated a broad process of consultation, assessment, and analysis leading to a new Integrated Strategic Plan 2002-2007 to attack poverty. USAID/Uganda supports the Government of Uganda's highly effective action plan to eliminate mass poverty by 2017. USAID dedicates itself to assisting the people of Uganda in attaining their full potential—as individuals and collectively as a nation—by assisting Uganda to reduce mass poverty as articulated in the government's Poverty Eradication Action Plan.

Past and ongoing USAID development programs have been recognized for their success, and the new programming will be an important catalyst in assisting Ugandans to further improve the quality of their lives. While Uganda has made significant progress in the past 16 years, much more remains to be done. USAID/Uganda is committed to working with its partners to provide a dynamic assistance program that builds on Uganda's own potential.

USAID's new program in Uganda is organized around three of the strategic objectives:

Strategic objective 7: Expanded Sustainable Economic Opportunities for Rural Sector Growth—through efforts that will increase food security, agricultural and natural resource systems and competitiveness and improving the enabling environment for broad based economic growth.

Strategic objective 8: Improved Human Capacity—through the effective use of social sector services, an increased capacity to sustain social sector services, and a strengthened enabling environment for human capacity improvement. Quality education and health care are an emphasis.

Strategic objective 9: More Effective and Participatory Governance—through strengthened devolution of authority and separation of powers, and the mitigation and reduction of conflict.

Appendix I

Letter of Introduction

Telephone: General Lines: 340874 / 231563/9
Permanent Secretary's Office: 256 - 41 - 340872
Fax: 256 - 41 - 231584

IN ANY CORRESPONDENCE ON THIS SUBJECT PLEASE QUOTE No: DGHS/75

THE REPUBLIC OF UGANDA

Ministry of Health
P.O. Box 7272
Kampala
Uganda

District Director Health Services

June 4, 2002

Re Baseline Survey for logistics and HIV/AIDS services in Government and NGO health facilities in Uganda

The Ministry of Health is presently conducting a nationwide survey of both logistics issues and HIV/AIDS services at MOH and NGO health facilities. The overall purpose is to provide a baseline for expected changes in the logistics systems for drugs and medical supplies and expanded HIV/AIDS service provision.

The survey will be conducted in 12 randomly selected districts, including yours. Training for the survey team has begun and we will start the survey work in your district, Monday, June 10th. We will survey major hospital facilities, most HC IVs and a subset of HCIII and HCII facilities, which have been selected randomly.

We would like to request that you provide one staff from the District health office to help coordinate the smooth operation of this survey in your district. The individual would join the data collection team as they visit facilities in your district and would have to be available full-time from June 10th – 14th and June 17th – 21st. The survey will cover normal costs of their involvement for this two-week period.

Please accord the survey teams your maximum support and facilitation.

F.G. Omaswa
Director General Health Services
CC DHS (C&C)
DHS (P&D)