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WHO GOES WHERE AND WHY? EXAMINING HIV COUNSELING AND TESTING SERVICES IN THE PUBLIC AND PRIVATE SECTORS IN ZAMBIA

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This publication was produced for review by the United States Agency for International Development. It was prepared by Ilana Ron, Wenjuan Wang and Oyunbileg Magvanjav for the Private Sector Partnerships-*One* project.

PSP-*One*
PRIVATE SECTOR PARTNERSHIPS FOR BETTER HEALTH

Country Report

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

ART	Antiretroviral Therapy
CHAMP	Comprehensive HIV/AIDS Management Programme
CHAZ	Churches Health Association of Zambia
DBF	District Basket Fund
FBO	Faith-based Organization
FHI	Family Health International
FP	Family Planning
HCT	HIV Counseling and Testing
JSI	John Snow Inc.
MCZ	Medical Council of Zambia
MOH	Ministry of Health
NGO	Non-governmental Organization
OOP	Out-of-Pocket Payment
PDA	Personal Digital Assistant
PEPFAR	President's Emergency Plan for AIDS Relief
PLWHIV	People Living With HIV/AIDS
PMTCT	Prevention of Mother-to-Child Transmission
PSP-*One*	Private Sector Partnerships-*One* Project (USAID-funded; 2005- 2009)
SFH	Society for Family Health
SPA	Service Provision Assessment
UNAIDS	United Nations Joint Programme on HIV/AIDS
USAID	United States Agency for International Development
UNICEF	United Nations Children's Fund
USG	United States Government
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
ZSBS	Zambia Sexual Behavior Survey
ZDHS	Zambia Demographic and Health Survey
ZVCTS	Zambia Voluntary Counseling and Testing Services

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1. INTRODUCTION

Zambia is a small republic in Sub-Saharan Africa with a population of nearly 12 million. Unemployment and poverty levels are significant concerns: 80 percent of Zambians live on less than US $2 per day. Of the nine provinces in Zambia, two—Lusaka and Copperbelt—are predominantly urban, while the remaining seven are primarily rural. The urban population is 4.5 million.

HIV/AIDS prevalence is significant, with an adult prevalence rate of 14.3 percent (16.1percent among women and 12.3 percent among men), according to the most recent Zambian Demographic and Health Survey (ZDHS 2007). People living in urban areas are more likely to be infected than those in rural areas (20 percent versus 10 percent). HIV prevalence among adults ranges from just under 7 percent in the Northern and Northwest provinces (6.8 percent and 6.9 percent, respectively) to 20.8 percent in Lusaka province.

The country faces a severe shortage in human resources for health. In 2006, Zambia recorded only 646 doctors—just 28 percent of its target of 2,300 (Schatz 2008). The same year the country recorded only 6,096 nurses, well below the national target of 16,732 nurses. Currently, the Zambian government finances 46.8 percent of total health expenditures, while private sources—including donor-funded NGOs, private firms, and households—finance the remaining 53.2 percent (WHO 2008).

The private sector, including the private for-profit sector, plays an important role in providing HIV and other health care services to Zambians. More information is needed, however, about why clients utiliize the private for-profit sector for HIV services and the quality of those services. The role of the private for-profit sector in offering VCT services is of particular interest for the Private Sector Partnerships-*One* (PSP-*One*) project. PSP-*One* is the United States Agency for International Development's (USAID) flagship global project to increase the private sector's provision of high-quality reproductive health, family planning, and HIV products and services in the developing world.

1.1 HIV COUNSELING AND TESTING

HIV counseling and testing (HCT) is the entry-point to HIV/AIDS services for people who are living with HIV (PLWHIV) and offers an opportunity to provide risk reduction counseling and information to all clients regardless of their HIV status. With approximately 1.1 million PLWHIV, the Ministry of Health (MOH) in Zambia recognizes the importance of providing high quality HCT services in the country.

Zambia's National HIV/AIDS Strategic Framework 2006-2010 developed its targets based on the 2005 Zambia Sexual Behavior Survey (ZSBS). The ZSBS reports that only 11 percent of adult males and 15 percent of adult females have ever been tested for HIV (ZSBS 2005), although 73 percent of all respondents indicated that they would like to be tested (or re-tested) for HIV. By 2010, the MOH aims to increase the percentage of Zambians ever tested for HIV to 20 percent for adult males and 25 percent for adult females. As of 2006, there were 883 registered HCT sites in Zambia. But with an estimated 82,700 Zambians expected to become newly infected with HIV in 2009 (an increase from just over 70,000 in 2007), the rate of uptake and efficacy of HCT may not be sufficient to prevent new HIV infections (PlusNews 2009).

Voluntary counseling and testing (VCT) means that a client must voluntarily request an HIV test. The core components of VCT include: pre- and post-test counseling on sexual behavior and risk reduction; the HIV test; disclosure of results to the client; and appropriate referrals for care and support, based on the HIV test result. There are other modes of HCT, including provider-initiated HCT, but most large-scale prevention and testing efforts in high-prevalence countries first prioritize VCT as a key prevention tactic. VCT services are offered in four sectors in Zambia: public, private for-profit, non-governmental organization (NGO), and mission.

1.2 EXISTING ZAMBIAN NATIONAL GUIDELINES FOR HIV COUNSELING AND TESTING

The MOH, in conjunction with a multi-disciplinary team representing public health workers, NGOs, physicians, social workers, counselors, and laboratory experts, developed the Zambian National Guidelines for HIV Counseling and Testing in March 2006. All VCT facilities, including private sites, are expected to follow these guidelines endorsed by the MOH. The National Guidelines include recommended standards for VCT as specified by the World Health Organization (WHO) and the United Nations Joint Programme on HIV/AIDS (UNAIDS).

The National Guidelines are the main standard for evaluating high quality VCT practices in Zambia. Below are the key benchmarks of quality for counseling and infrastructure, extracted from the National Guidelines, relating to VCT services. The National Guidelines also specify best practice standards for HIV testing and confirmation.

1.2.1 KEY ELEMENTS OF QUALITY FOR HIV COUNSELING, ACCORDING TO ZAMBIAN NATIONAL GUIDELINES FOR HIV COUNSELING AND TESTING (2006)

- The client must make the decision him/herself to receive VCT services, and consent must always be obtained and documented before testing occurs. Additionally, confidentiality must be maintained throughout the process.
- Counseling should be adapted to the client's needs, and approaches may include individual and couple sessions.
- Pre-test counseling should be centered on the client's: 1) personal history and risk of exposure to HIV; 2) understanding of HIV/AIDS and experience in dealing with crisis situations; 3) previous attempts at reducing risk; 4) understanding of the HIV test; and 5) decision whether to take it.
- The counselor should discuss with the client: 1) basic facts about HIV/AIDS (prevention, treatment, etc.) and the meaning of the HIV test; 2) a personal risk assessment; 3) the client's readiness and intentions after learning his/her status; 4) ways to cope with an HIV-positive result; 5) ways of staying uninfected if the test results are negative; 6) family planning (FP) methods; 7) potential support from friends and family; 8) consent; and any other concerns the client might have.
- The clerk/counselor should be able to explain the procedures (including wait time) and offer educational materials about VCT and HIV in the waiting rooms.
- If possible, the results should be given in the same day, in a private setting, and the client may request to have a supportive person accompany him/her.

- Clients who test negative should be encouraged to return within three months to ensure that they are truly uninfected.
- Regardless of the result, the client should be counseled on leading a healthy lifestyle and developing a personalized risk-reduction plan.
- HIV-positive clients should be referred to appropriate treatment services. Other referrals (regardless of the result) include medical, social, legal, economical, spiritual, and psychological support.
- If a client requests only testing, the counselor should explain that VCT services are a package and should encourage the client to come when s/he has enough time to undergo both procedures.
- A client may request only counseling services, and should not be pressured or coerced into being tested.

1.2.2 KEY ELEMENTS OF QUALITY FOR VCT INFRASTRUCTURE, ACCORDING TO ZAMBIAN NATIONAL GUIDELINES FOR HIV COUNSELING AND TESTING (2006)

- Does the VCT room(s) have good lighting?
- Does the VCT room(s) have adequate space?
- Is the VCT room(s) well-ventilated?
- Does the VCT room(s) provide privacy and confidentiality for the client?
- Is there water available for hand-washing in the VCT room?
- Availability of information, education and communication (IEC) materials on HIV/AIDS
- Availability of a waiting area with chairs/benches for VCT clients
- Availability of furniture, supplies and test kits including:
    - HIV test kit #1 (screening test) - Determine
    - HIV test kit #2 (confirmation test) - Genie II or Unigold
    - HIV test kit #3 (tie-breaker test) - Bionor
    - Gloves
    - Alcohol/methylated spirit
    - Cotton
    - Lancets
    - Safety box for disposal of needles/lancets
    - At least 1 desk
    - At least 3 chairs
    - At least 1 lockable cabinet

1.3 PROVISION OF VCT SERVICES IN ZAMBIA

Both the public and private health sectors in Zambia offer extensive VCT and treatment services. According to the 2005 HIV Zambia Service Provision Assessment (SPA), 53 percent of all non-government facilities in Zambia provided VCT services, compared to 39 percent of government facilities.

The United States Government (USG) and its President's Emergency Plan for AIDS Relief (PEPFAR) has heavily supported VCT and treatment services in Zambia. PEPFAR provided more than $269 million in FY08 to Zambia to support comprehensive HIV/AIDS prevention, treatment and care programs. As of

September 2008, 640,000 VCT encounters have been reported, and 167,500 Zambians are receiving antiretroviral treatment (ART).

VCT services are offered in four health sectors in Zambia: public, private for-profit, non-governmental organization (NGO), and Mission.

1.3.1 PRIVATE FACILITIES IN ZAMBIA

The 2005 HIV SPA distinguishes the private health facilities offering HIV services in Zambia. These types of facilities include:

- **Private for-profit** mine hospitals and clinics (located almost exclusively in Copperbelt province); urban hospitals; clinics; and practitioners
- **Mission** hospitals and clinics, commonly located in rural areas and poorer districts throughout Zambia, and operated by faith-based organizations
- **NGO** facilities and clinics that are facilitated by international or national non-profit organizations

According to the Private Practitioners Association and Medical Council of Zambia (MCZ), there are 430 private health facilities in the country, with 380 concentrated in urban areas (180 are in Lusaka). The mission sector provides about 30 percent of total health care in rural areas, with some 30 hospitals and 60 clinics. The Churches Health Association of Zambia (CHAZ) coordinates their work and represents their interests, and the MOH commissions and funds their services through the District Basket Fund (DBF).

1.4 WHAT DOES THE LITERATURE TELL US ABOUT VCT QUALITY?

Prior to designing and launching the study, PSP-*One* extensively reviewed both "grey" and published literature about measuring the quality of VCT services, particularly in Sub-Saharan Africa. The literature review grounded our study approach in evidence-based best practices for measurement, and also highlighted key issues about VCT quality that required further investigation. Below are some key themes emerging from the literature review that shaped the design and overall approach of the study.

1.4.1 THE TOTAL COST OF VCT SERVICES TO THE CLIENT MUST BE MEASURED

Increased levels of donor funding for HIV/AIDS services have heavily subsidized VCT services, primarily in the public and NGO sectors. However, there are still other costs associated with VCT services, such as the cost of transport and lost wages for hourly workers (Whiteside 2006). Thus, more data should be collected about the *total* cost of service for clients when accessing VCT and any follow-up care or related referrals, including any costs for transportation and lost wages. Research conducted in Kenya (Taegtmeyer 2006) suggests that the convenience of VCT services to a client is an important measure of quality. Facilities may be *accessible* to a client (e.g., a client is able to receive service on demand), but those facilities may not be convenient to a client's residence or work schedule.

1.4.2 ACCURATELY MEASURING THE QUALITY OF VCT SERVICES SHOULD INCLUDE A QUALITATIVE COMPONENT

WHO recommends utilizing qualitative research methods, including focus group discussions or open-ended client exit interviews, in addition to benchmarking quality against standard close-ended indicators

(WHO 2004). Understanding how clients perceive their VCT services adds an important level of detail, richness and nuance to an overall quality score.

Qualitative methods, used in combination with quantitative methods to generate client profiles, can also uncover clients' pre-service perceptions of quality relating to the various sectors.

1.4.3 FRAMEWORKS FOR UNDERSTANDING QUALITY OF VCT SERVICES ARE NOT WELL DEVELOPED

One framework for measuring the quality of health services, developed by Donabedian, focuses on three main attributes: structure, process, and outcome.

- *Structural* dimensions of quality examine the infrastructure and management systems in which care is delivered.
- *Process* dimensions of quality identify the extent to which good medical practice has been applied, as well as the interpersonal characteristics and skills of providers.
- *Outcome* dimensions of quality measure the impact of care on the overall health of patients.

Donabedian's framework is used extensively to measure the quality of FP services, in both public and private sectors (Agha 2007). However, there is no existing well-tested framework to fully understand the quality of VCT services. The Discussion section of this report will present an adaptation of Donabedian's framework to better reflect the quality dimensions of VCT.

1.4.4 MEASURING CLIENT SATISFACTION WITH VCT SERVICES HAS METHODOLOGICAL AND PRACTICAL CHALLENGES

Client satisfaction is used as an overall important indicator of quality for a wide range of health services. In many satisfaction surveys throughout both the developed and developing world, clients tend to report overall high levels of satisfaction with health services (Sitzia 1997). A variety of evidence-based theories have emerged, however, to show the potential unreliability of client satisfaction as an important indicator for overall quality. For instance, Williams suggests that clients only express dissatisfaction when an extreme negative event occurs; shades of dissatisfaction may not be captured for less extreme negative experiences (Williams 1994). Researchers have shown that the interpersonal aspects of care are often regarded by clients as the principal component of satisfaction (Blanchard 1990). Overall, client satisfaction is an important dimension of quality, but there are significant methodological challenges to accurately assessing satisfaction.

1.5 RESEARCH OBJECTIVES

Quality of care is an essential component of effective health service delivery generally, and is particularly critical in the delivery of HIV/AIDS services. However, not enough is known about the *quality* of HIV/AIDS services across these four sectors active in service provision in Zambia. In addition, the extent to which the private for-profit sector is providing HIV/AIDS services has been well-documented.

Thus, the PSP-*One* project undertook a comparative study to examine quality of HIV VCT care across these four health service sectors and to evaluate the various strengths and weaknesses associated with each sector, to produce evidence-based guidance for effective partnerships and coordination across sectors.

Effective, high-quality counseling is critical for risk reduction. VCT quality is reviewed in the public sector during performance assessment visits, and it is also reviewed to varying degrees in the NGO

sector. But there has not been a comprehensive study to assess and compare the quality of VCT across all four sectors, including the private for-profit sector. This study aims to identify best practices that are implemented within each sector that can be shared with and inform the practices of other sectors. The findings and recommendations from the study will be shared with the Zambia MOH and other stakeholders in Zambia.

Additionally, PSP-*One* sought to describe the profiles of clients who choose to receive VCT services in each sector. These profiles are instructive for both understanding patterns of utilization and for making recommendations to tailor sector-specific services to meet client needs.

The objectives of the study are as follows:

- To document the role of the private for-profit sector in VCT service delivery;
- To establish whether there are significant differences in the quality of VCT services, particularly in counseling and referral practices, between public, private for-profit, NGO, and mission providers;
- To measure key VCT service statistics at facilities within each sector;
- To document and measure how satisfied clients are with the VCT services they have received in the four sectors, and to document differences in levels of satisfaction across these sectors; and
- To identify the profiles of clients choosing to receive VCT services in each sector.

2. STUDY METHODOLOGY

2.1 STUDY AREA

We selected Copperbelt and Luapula as our study provinces because we wanted to investigate both an urban and a rural province. HIV prevalence among adults is approximately 17 percent in Copperbelt and 13 percent in Luapula (ZDHS 2007). Identifying an urban and a rural province allowed us to investigate urban/rural differences in quality, while ensuring that an adequate number of private sites were visited. Additionally, Copperbelt has a large concentration of private for-profit facilities, and Luapula was the most convenient USAID-supported rural province for our team of data collectors. Additionally, 60 percent of all facilities in Copperbelt provided VCT services, compared to 20 percent of facilities in Luapula (SPA 2005).

2.2 SAMPLING DESIGN

The target population for this survey is all health facilities that provide VCT services in the Copperbelt and Luapula provinces of Zambia. Although there are other important modes of HCT in Zambia, including provider-initiated HCT and prevention of mother-to-child transmission (PMTCT), the study focuses on those counseling and testing encounters where clients initiate the HIV test—i.e., VCT. By focusing on VCT, we can assess client motivations for visiting a particular sector specifically for a HIV test. Additionally, only static VCT sites were eligible for inclusion in this study, since mobile VCT is most often used by NGO facilities specializing in HIV services, and less often used by general private for-profit facilities. Static VCT sites include both stand-alone VCT facilities and other health facilities that provide VCT services.

In each province, we selected facilities where VCT services are supported by USAID and PEPFAR. There is no comprehensive list of VCT sites in Zambia. Therefore, PSP-*One* compiled a "master list" of facilities based on data from the following sources:

- Zambia Voluntary Counseling and Testing Services (ZVCTS)
  All VCT providers (public, private for-profit, NGO and mission) are required to register with ZVCTS. ZVCTS assigns a facility number to each facility once registered, and this registration facilitates access to HIV test kits through the national test kit system (through the central Medical Stores Limited). Cross-checking with the other sources of information mentioned in this section showed that the ZVCTS list was not complete.
- Medical Council of Zambia (MCZ)
  All private for-profit facilities are required to register with MCZ on an annual basis. MCZ provided a list of all facilities registered in 2008, as well as all registered private ART sites (which usually also provide VCT).
- Zambia Prevention, Care and Treatment Partnership (ZPCT)
  This project, implemented by Family Health International (FHI) and other partners, is supporting HCT services at 66 government health facilities in Copperbelt province. In addition, ZPCT is supporting all government health centers and hospitals in Luapula province with funding from USAID (68 facilities). The United Nations Children's Fund (UNICEF) contributes funding to support PMTCT at 53 additional government facilities in Luapula, including strengthening HCT services. Three of the ZPCT-supported facilities in Luapula also fall under CHAZ.

- Comprehensive HIV/AIDS Management Programme (CHAMP)
  CHAMP supports VCT activities at 33 workplace sites, including private health facilities (primarily operated by mining companies) and public health facilities, in Copperbelt province.
- Society for Family Health (SFH)
  SFH supports three VCT sites in Copperbelt and Luapula provinces—two operated by partners as a "franchise," and one directly managed by SFH.
- CHAZ
  CHAZ supports 22 mission health facilities in Copperbelt and 25 in Luapula. In addition, CHAZ provided PSP-*One* with a list of faith-based organizations (FBOs) that provide VCT services in the two study provinces.
- John Snow, Inc (JSI)
  JSI is tasked with assisting the MOH with rolling out an HIV test kit logistic system to all facilities that provide HCT services.

Based on these various lists, we compiled a sampling frame of 373 health facilities providing VCT services in Copperbelt and 157 facilities in Luapula, for a total of 530 facilities. A separate list was compiled for each of the four sectors. For each type of sector, equal probability systematic sampling was used to select the facility samples.

Table 1 shows a breakdown of the universe of sites identified; the number of sites selected by province; and the number of clients interviewed.

TABLE 1. DISTRIBUTION OF THE SAMPLE OF FACILITY SITES BY PROVINCE

	Copperbelt			Luapula		
	Universe of sites	# of sites selected	# of clients interviewed	Universe of sites	# of sites selected	# of clients interviewed
NGO	24	9	79	13	5	20
Private	166	13	84	9	0	0
Public	121	17	71	119	11	66
Mission	14	3	8	10	2	18
Unknown	50	5	18	7	0	0
TOTAL	373	47	260	157	18	104

From this master sample, we selected 14 NGO facilities out of the 37 in the sampling frame—nine in Copperbelt and five in Luapula. The three SFH sites were selected because SFH served as an advisor to the study and because it employed a unique quality assurance system for its franchised sites.

We originally sampled 28 facilities from the public sector. The list of public facilities was first sorted by type of facility, including hospitals and health centers for each province. The facilities were then sorted by estimated size (large, medium and small). Facilities of unknown size were considered as a separate category. Large hospitals were purposively selected so that we could ensure the maximum number of clients possible in our study. After we sorted the public sector list, equal probability systematic sampling was used with a fractional sampling interval to ensure that we selected the exact number of facilities that we required. We sampled facilities from the private for-profit and mission sectors using a similar methodology.

We anticipated that our team of data collectors would not succeed in visiting every sample site, due to a variety of potential barriers: sites being closed on the day of data collection; unavailability of testing kits; or a refusal by the facility manager to allow data collectors to interview clients. We therefore constructed a reserve sample list that allowed data collectors to replace sites by sector and province, in case of any challenges in the field. The reserve list preserved the parameters used for selection in the original sampling frame.

The final list of sites visited included a smaller number of private sites than anticipated. In the course of data collection we discovered that *no* private sites in Luapula actually provided VCT services, even though nine were registered as such.

2.2.1 SELECTION CRITERIA FOR INTERVIEWS

Figure 1 identifies inclusion and exclusion parameters for respondents. Data collectors were instructed to interview as many clients as possible who fulfilled the inclusion criteria, in a six-hour period. While all eligible clients participated in the closed-ended client exit interviews, only four clients per site were randomly selected for additional participation in the open-ended interviews.

FIGURE 1: INCLUSION AND EXCLUSION CRITERIA FOR DATA COLLECTION

	Include	Exclude
Client Exit Interview	Clients attending the site that fulfill all of the following inclusion criteria: • Age 18 or above • Received HIV counseling, testing AND results at the site • Provides written informed consent to participate in the interview All clients visiting a facility over a six-hour period will be approached for participation in the study.	Data collectors will exclude: • Clients below the age of 18 • Clients who do not complete the HIV counseling, testing and receiving of results • Clients who do not consent to being interviewed
Facility Assessment Tool	The person who is in charge of each CT site. This may include the following titles/ designations: • Government or mission sites: facility manager (or acting facility manager) • In-charge (or acting in-charge) • Private clinic: clinic owner or clinic manager • NGO: Site manager, site coordinator, CT coordinator/officer (person who is responsible for overseeing the CT services at the site)	• N/A – include any relevant person identified by the person in charge of the CT site

2.3 DATA COLLECTION INSTRUMENTS AND APPROACH

We employed three instruments in this study: a closed-ended client exit interview, an open-ended client exit interview, and a facility assessment instrument. We employed a mixed-methods approach by using both closed-ended and open-ended client exit interview techniques. The closed-ended instruments allowed us to benchmark VCT quality against internationally recognized indicators, while the open-

ended instruments allowed us to better understand the perceptions of clients about why they chose to receive VCT services and their intention to return for future testing.

The client exit interviews aimed to understand the VCT experience from the perspective of the client, as well as to use ZDHS-derived questions on demographics and socio-economic status to develop profiles of clients accessing VCT services in each sector. Quality questions were based on the Zambian National Guidelines and relate to structural and process elements of VCT quality, with a particular emphasis on counseling, future behavior change intention, and referral uptake intention. Client exit instruments were translated into Bemba.

The facility assessment instrument was designed to capture information related to the VCT services offered at each facility. There are three parts to this instrument: a brief interview with the facility manager; a review of the last month's VCT registry and service statistics; and a brief observation of the physical environment of the VCT site.

Data collectors were instructed to begin data collection at each site by interviewing the facility manager to familiarize him/her with the purposes of the study before proceeding. The facility manager then granted permission to the data collectors to review the last month's CT registry and to conduct a brief observation when there were no clients receiving services. The facility assessment instrument was administered in English, as facility managers use English in their day-to-day operations and CT registry information is maintained in English.

2.4 DATA COLLECTION PROCEDURES

In January and March 2009, the team of data collectors received training on: the goals of the study; research methods; using the Personal Digital Assistants (PDA); and data collection procedures. PSP-*One* researchers facilitated and observed two rounds of pre-testing of all three instruments at a high-volume SFH site in Lusaka.

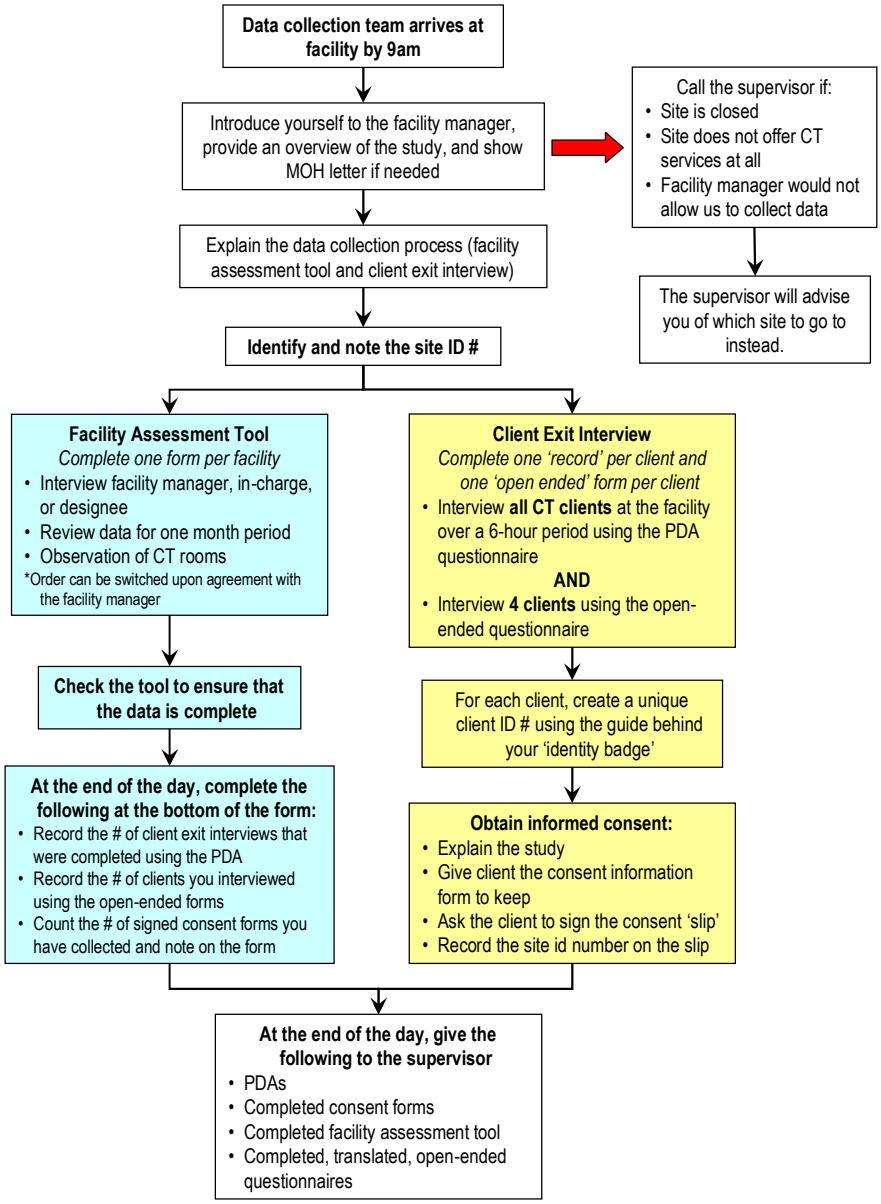
Data collection occurred from April to May 2009. Initially, data collectors spent three weeks in each province, for a total of six weeks of data collection. Data collectors later returned to Copperbelt province for an additional week of data collection, to revisit sites that were closed during the initial visit (or did not offer testing services on that day) and to revisit private sites with low client load. Revisiting private sites was conducted in accordance with our sampling procedures, to ensure an adequate number of private sector client interviews to make valid cross-sector comparisons.

Interviews with clients and facility managers were conducted face-to-face. The interviewer briefly explained the purpose of the study and obtained signed informed consent to participate in the study. The interview time for clients averaged 20 minutes, with an additional ten minutes for the open-ended interviews. The interview time for facility managers averaged 30 minutes.

Closed-ended client interviews were conducted using Palm Pilot Tungsten E2 PDAs. We utilized Datadyne's EpiSurveyor software to record all answers to the closed-ended questions. The data collection supervisor was required to email the cumulative completed client records on a weekly basis to PSP-*One.* Using EpiSurveyor allowed PSP-*One* to maintain stronger quality assurance, to identify sites or sectors that required additional data collection visits, and to eliminate the need for client exit interview data entry.

Four teams of two data collectors each visited one CT site per day of data collection. There was one supervisor overseeing all four teams of data collectors and communicating progress to PSP-*One* researchers on a weekly basis. One data collector interviewed clients at the site. The other data collector interviewed the facility manager, reviewed the CT registry, and conducted a brief observation of the physical environment of the CT site. Figure 2 provides an overview of the data collection procedures at each facility.

FIGURE 2: OVERVIEW OF DATA COLLECTION PROCEDURES



2.5 DATA ANALYSIS

Data analysis was conducted with *STATA 10* Statistical Software. Separate analysis was conducted for

client and facility manager interviews. Given the complex study design, the sample weights were computed according to the probability of selection and nonresponse rates. All results were adjusted accordingly.

The open-ended client interviews were transcribed and imported into NVIVO 7, a software package designed to facilitate rigorous qualitative data analysis. We coded the interview transcripts by emerging themes and sorted the data by sector and province. We were able to quantify the relative frequency of a particular theme across sectors and provinces by noting how often clients mentioned a particular idea or concept. The open-ended instrument did not include extensive prompts; clients were encouraged to respond in their own words about their experience with VCT services.

2.6 PARTICIPATORY STAKEHOLDER CONSULTATION

Prior to launching the study, PSP-*One* discussed the overall research questions, as well as the proposed methods for data collection, with a wide variety of relevant stakeholders in Zambia. These stakeholders shared grey (unpublished) internal evaluations about CT, and provided guidance for entering sites and compiling the master sample list.

USAID/Zambia and the MOH commented on study objectives and proposed scope. Cooperating partners—including SFH, ZPCT, CHAZ, MCZ and CHAMP—participated in reviewing the study instruments. SFH and ZPCT participated in training our team of data collectors in identifying best practices for VCT.

2.7 LIMITATIONS OF THE STUDY

Data from this study are valid and generalizable only at the provincial level, specifically, for Copperbelt and Luapula, two key USAID-supported provinces. We cannot generalize to the entire country based on these results, although these data are instructive in allowing us to understand trends in USAID-supported rural and urban provinces. Clients who attended a VCT session at a sampled facility are not representative of the population in the province as a whole; by its very nature, clients choosing to access VCT are self-selecting and may have health behaviors different from the rest of the population. Additionally, data collectors interviewed either the facility manager or the acting in-charge of each site on the specified day of data collection. In cases where the main facility manager was not present, the acting in-charge may have answered questions with less accuracy or detail.

2.8 ETHICAL CONSIDERATIONS

The study protocol and instruments were approved by both the Abt Associates' Institutional Review Board (IRB) and ERES Converge, a Zambian private IRB approved by the MOH to condone in-country research. In addition, the MOH approved the study design and objectives. Written informed consent was obtained for all participants.

3. CLIENT LEVEL FINDINGS

This section presents findings from both the closed-ended and open-ended client exit interviews. These results are instructive both in understanding the quality of VCT services across the sectors and in identifying the profiles of clients who choose to access VCT in a particular sector.

3.1 DEMOGRAPHIC PROFILE OF VCT CLIENTS

Table 2 shows the demographic characteristics of interviewed clients. We utilized ZDHS demographic questions as the basis for the profile questions in our instrument. Results show that there is not a statistically significant difference in utilization of a particular sector for VCT according to gender, but there is a significant difference in age. Younger clients are most likely to visit NGO sites, while the oldest clients are most likely to visit private sites. There are also significant differences in the education levels of clients, with the most educated clients accessing the NGO sector. More importantly, across all sectors, clients with no education or only primary levels of education are less likely to access VCT services: on average, only 6 percent of clients receiving VCT had no or primary levels of education. Note that, for Zambia overall, 64.8 percent of women have no education or primary education and 50.8 percent of men have no education or primary education. Zambians aged 35-39 test positive for HIV (23.6 percent) at the highest rates compared to all other age brackets (ZDHS 2007).

TABLE 2: CLIENT DEMOGRAPHIC CHARACTERISTICS

	NGO n=99	Private n=84	Government n=137	Mission n=26	Unknown n=18	P value *
	%	%	%	%	%	
Province						
Copperbelt	75.1	100.0	41.5	28.2	100.0	
Luapula	24.9	0.0	58.5	71.8	0.0	
Male	49.6	42.9	33.3	47.7	50.0	0.2109
Female	50.4	57.1	66.7	52.3	50.0	
Median Age (years)	28.0	38.0	31.0	35.5	44.0	
Age Groups						
15-24	37.3	14.2	27.6	15.5	0.0	0.000
25-34	29.5	25.0	36.8	34.8	16.7	

	NGO n=99	Private n=84	Government n=137	Mission n=26	Unknown n=18	P value *
35-44	18.9	39.1	28.6	34.3	38.9	
45+	14.4	21.6	7.0	15.5	44.4	
Education						
None	1.4	0.0	2.6	0.0	5.6	0.001
Primary	6.0	2.4	3.8	0.0	11.1	
Secondary	29.0	29.8	48.9	61.1	44.4	
Higher than secondary	50.5	45.4	37.6	38.9	38.9	
Don't know	13.1	22.4	7.0	0.0	0.0	
Self-perceived social status						
Lower	50.4	31.2	30.3	32.4	61.1	0.007
Middle	41.2	61.8	67.6	63.0	27.8	
Upper	7.9	7.1	2.1	4.6	11.1	

*P value of less than 0.05 indicates a statistically significant difference between the four sectors, P value of greater than 0.05 indicates that there is not a statistically significant differences between the four sectors.

Table 3 shows the percentage of clients who had previously received a HIV test. On this measure, there are no significant differences between the sectors. 33 percent of clients had previously been tested for HIV. According to the 2007 ZDHS, 33 percent of people in Copperbelt and 23 percent of people in Luapula had ever been tested for HIV.

TABLE 3: RECEIVED HIV TEST IN THE PAST

Prior HIV testing experience	NGO	Private	Government	Mission	Unknown	P value
Yes	31.0	35.7	38.2	38.3	22.2	0.5967
No	69.0	64.3	61.8	61.7	77.8	

We examined both means of travel and time spent traveling to the VCT site, to ascertain how geographically proximate the VCT services were for clients. Table 4 shows the means of transport, time spent traveling, and the cost of transport for clients in all sectors. Overall, most clients walked to their sites and spent less than 30 minutes commuting. However, there are significant differences by sector in terms of geographic proximity: NGO clients were most likely to walk, while public transportation was used most often in the private sector. NGO and private clients had a significantly shorter commuting time than public or mission clients. Most clients did not pay for transportation to their sites.

Clients revealed in open-ended interviews that proximity or convenience is an essential factor for considering a facility for services. This focus on proximity indicates that clients do not fear being recognized at VCT sites, either by providers or by other community members. The preference for VCT services "close to home" suggests that fear of stigma for choosing to receive a HIV test is not a major concern.

Geographic Proximity:

"It's the only hospital which is at least near to my home."

"I don't need to pay for transport when I come here."

"This is the only clinic that is found in our area. It is just 10 minutes away from where I stay."

TABLE 4: TRANSPORTATION PROFILES FOR CLIENTS

Travel to the site	NGO	Private	Government	Mission	Unknown	P value
Means of travel to site						
Walked	74.0	65.6	59.4	54.0	61.1	0.001
Took public transportation	12.9	20.2	11.7	14.1	11.1	
Used personal car	3.6	9.4	2.1	0.0	0.0	
Taxi	3.2	2.4	3.2	4.4	5.6	
Bicycle	2.7	1.2	21.0	27.5	16.7	
Other	3.6	1.2	2.6	0.0	5.6	
Time taken to travel to site						
Less than 30 minutes	65.7	63.0	43.5	34.0	64.7	0.000
30 minutes	27.5	33.4	40.0	15.2	23.5	

Travel to the site	NGO	Private	Government	Mission	Unknown	P value
1-2 hours	6.9	1.2	9.7	14.9	11.8	
More than 2 hours	0.0	2.4	7.0	35.9	0.0	
Paid for transportation today						
Yes	19.7	30.9	18.7	30.5	22.2	0.1501
No	80.3	69.1	81.3	69.5	77.8	

3.2 COUNSELOR-CLIENT INTERACTIONS

We asked clients to recall different aspects of their VCT session and benchmarked their responses against the Zambian National Guidelines.

Table 5 shows that there are significant differences between sectors in some elements of counselor clarity; however, there is no clear pattern across sectors and indicators. For indicator 2, "Counselor answered questions with enough detail" the NGO sector had the highest rates, although the private sector also performed well on this indicator. For indicator 3, "Counselor provided clear explanation of the HIV test result," the private sector performed the best; the vast majority of clients across all sectors felt they received a clear explanation of their HIV test result.

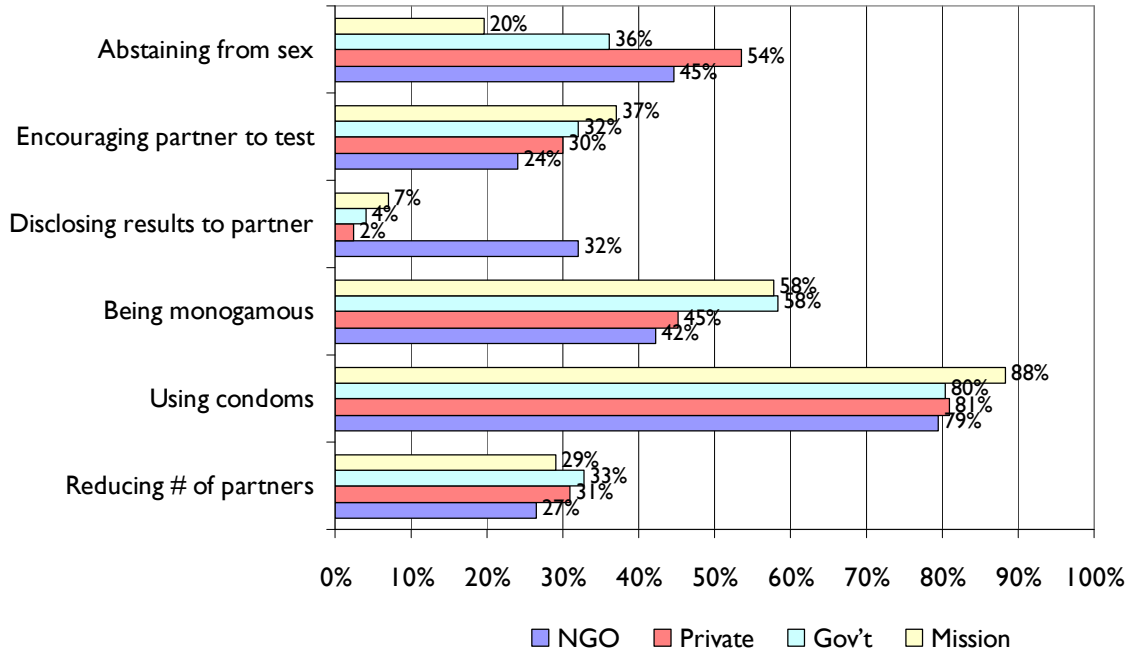
TABLE 5: CLARITY OF INFORMATION PROVIDED TO CLIENTS

Information provided to clients	NGO	Private	Public	Mission	Unknown	P value
1. Counselor's clarity of explanation at visit about what to expect						
Very clearly	86.4	82.2	79.1	74.3	83.3	0.39
Clearly	13.6	16.7	19.4	25.7	16.7	
Undecided	0.0	1.2	0.0	0.0	0.0	
Unclearly	0.0	0.0	1.5	0.0	0.0	
2. Counselor answered questions with enough detail						
Yes	90.0	86.8	77.9	75.1	66.7	0.09
No	5.4	2.4	3.6	0.0	5.6	

Information provided to clients	NGO	Private	Public	Mission	Unknown	P value
Don't know	0.0	1.2	2.7	3.8	0.0	
N/A	3.2	9.6	11.5	21.2	27.8	
No response	1.3	0.0	4.4	0.0	0.0	
3. Counselor's clarity of explanation about HIV test result						
Very clearly	73.7	84.6	69.1	66.8	66.7	0.00
Clearly	26.3	14.3	28.3	33.3	27.8	
Undecided	0.0	0.0	2.7	0.0	0.0	
Unclearly	0.0	1.2	0.0	0.0	0.0	
Very unclearly	0.0	0.0	0.0	0.0	5.6	

We examined which risk reduction methods counselors discussed with their clients, at both the pre-test and the post-test stage. Figure 3 presents underperformance in counseling on pertinent key risk reduction methods across all sectors. On average, less than one-third of clients across the sectors received counseling on reducing their number of sexual partners. Approximately 5 percent of clients received counseling about disclosing their test results to their partners. However, all sectors had high percentages for counseling clients about using condoms during sexual encounters.

FIGURE 3: METHODS DISCUSSED WITH COUNSELOR FOR REDUCING EXPOSURE TO HIV



Open-ended interviews asked clients to describe, unprompted, new information they had learned during their pre- and post-test counseling sessions. Clients reported a range of counseling topics and information that do not adhere to the National Guidelines and are not germane to a generalized HIV epidemic driven largely by heterosexual transmission (as in Zambia).

For instance, clients across all sectors and both provinces reported that they were counseled on preventing blood transmission of HIV via razor blades or blood transfusion. 45 percent of public sector clients in both Copperbelt and Luapula reported, unprompted, an emphasis on blood transmission of HIV during their pre-test counseling sessions. In fact, blood transmission was the most frequently discussed topic during pre-test counseling across all sectors.

Blood Transmission

"You can get HIV from sharing tattoo needles."

"You shouldn't share sharp instruments like needles."

"You should wear gloves if you are injured."

Additionally, 40 percent of clients across all sectors reported receiving counseling about using condoms during sexual encounters, since unprotected sexual intercourse could lead to HIV transmission. Far fewer clients received counseling on partner reduction. 15 percent of clients reported receiving pre-test counseling about living "positively" as a HIV-positive individual. For instance, a public sector client reported being told "that I can live a long life as long as I get tested and start taking the right medication and right food." Another public sector client believed "I can actually live longer than the person who is negative." The National Guidelines, however, state that pre-test counseling should focus more on risk reduction methods and an assessment of sexual behavior, than on strategies for responding to a HIV-positive test result.

3.3 WAITING TIMES AND TIME SPENT IN VCT SESSION

Waiting times are an important component of overall VCT quality. Long waiting times, particularly while waiting for a HIV test result, may deter clients from learning their HIV status. Table 6 shows a significant difference between sectors in the initial wait to see a counselor for pre-testing counseling. The NGO sector recorded the shortest wait—15 minutes—while clients in the mission sector waited the longest—42.5 minutes. There were no significant differences between sectors in the median amount of time spent by clients in their pre-test or post-test counseling sessions, or in waiting for a HIV test result. There were relatively low wait times for HIV test results after testing, and post-test counseling sessions were substantially shorter than pre-test counseling sessions.

TABLE 6: MINUTES SPENT WAITING AND IN SESSIONS WITH COUNSELOR

Time in Minutes	NGO	Private	Public	Mission	Unknown	P value
Median amount of time spent waiting to see counselor	15.0	25.0	30.0	42.5	52.5	0.000
Median amount of time spent in session with counselor	20.0	20.0	25.0	30.0	30.0	0.9436
Median amount of time spent waiting for HIV result	10.0	10.0	10.0	10.0	15.0	0.0029
Median amount of time spent speaking with counselor after receiving HIV test result	10.0	10.0	10.0	10.0	10.0	0.7655

3.4 INTERPERSONAL SKILLS OF VCT COUNSELORS

Table 7 reflects how clients perceived the interpersonal skills of their counselors as well as their comfort level in discussing intimate sexual issues with their counselors. Across most indicators of interpersonal skills, there were no significant differences between sectors. Overall, the vast majority of clients felt comfortable discussing intimate issues and the HIV test results, as well as its implications, with their counselors. In one indicator, "Felt comfortable asking counselor questions," we found a significant and important distinction between the sectors. 95.4 percent of clients in the NGO sector felt comfortable asking their counselor questions, compared to 75.9 percent of clients in the public sector. Levels of comfort in the private sector were relatively high: 88 percent of private sector clients felt comfortable asking their counselor questions.

TABLE 7: INTERPERSONAL INDICATORS OF VCT COUNSELORS

Interpersonal skills	NGO	Private	Public	Mission	Unknown	P value
Felt comfortable discussing sexual history						
Yes	98.6	97.6	96.2	96.2	100.0	0.73
No	1.4	2.4	3.8	3.8	0.0	
Felt comfortable discussing HIV test results						
Yes	96.4	100.0	96.2	96.2	94.4	0.16
No	3.6	0.0	3.8	3.8	5.6	

Interpersonal skills	NGO	Private	Public	Mission	Unknown	P value
Felt comfortable to discuss ways to reduce risk						
Yes	100.0	98.8	97.9	96.2	100.0	0.65
No	0.0	1.2	2.1	3.8	0.0	
Felt comfortable to discuss follow up services						
Yes	100.0	100.0	98.5	92.4	94.4	0.02
No	0.0	0.0	1.5	7.6	5.6	
Felt comfortable asking counselor questions						
Yes	95.4	88.0	74.9	75.1	66.7	0.00
No	1.3	3.5	19.2	7.3	5.6	
N/A	3.2	8.4	5.9	17.6	27.8	

3.5 SATISFACTION WITH PRIVACY OF VCT SESSION

The findings presented in Table 8 show no significant differences between sectors in levels of client satisfaction with the privacy of their VCT session. The great majority of clients are either "very satisfied" or "satisfied" with the privacy of their VCT experience. However, a much lower percentage—only 51.4 percent—of public sector clients were "very satisfied" with the privacy they experienced.

TABLE 8: CLIENT SATISFACTION WITH PRIVACY OF VCT SESSION

Level of satisfaction with privacy of VCT session	NGO	Private	Public	Mission	Unknown	P value
Very satisfied	68.8	70.3	51.4	78.1	66.7	0.12
Satisfied	28.0	26.2	35.6	21.9	22.2	
Undecided	1.3	1.2	2.7	0.0	5.6	
Not satisfied	1.4	2.4	9.7	0.0	5.6	
Very unsatisfied	0.4	0.0	0.6	0.0	0.0	

3.6 OUT-OF-POCKET PAYMENT FOR VCT SERVICE

We asked clients to report how much they paid out-of-pocket (OOP) to receive their VCT service. Table 9 shows that more NGO clients paid OOP for service than private sector clients, but the median amount they paid ($.21) was much lower than that paid by private sector clients ($7.50). As expected, very few clients paid OOP for VCT services in the public sector.

TABLE 9: CLIENT OUT-OF-POCKET PAYMENT FOR VCT SERVICES

	NGO	Private	Public	Mission
Paid for service received today				
Yes	20%	11%	4%	0%
No	80%	89%	96%	100%
Media Cost (in dollars)	$0.21	$7.50	$0.38	N/A

3.7 REFERRAL PRACTICES

This study did not measure or track the actual uptake of referrals by clients. However, we investigated how the different sectors made referrals for follow-up care during the VCT session, and also measured the intention of clients to attend a follow-up care appointment. The National Guidelines advise referrals not only for confirmation testing and follow-up care when testing positive, but also for follow-up psychosocial care and future VCT sessions for clients testing negative.

Table 10 shows significant differences across the sectors in all referral practices. The private sector was most likely and the NGO sector was the least likely to refer clients for follow-up care. In addition, while 88.8 percent of referred private sector clients received a referral card, a slip or a piece of paper, only 67.7 percent of referred public sector clients received a tangible reminder of the referral appointment. Finally, the public sector was most likely to refer clients for follow-up care at the same site, whereas the NGO sector was most likely to refer clients for follow-up care at a different site. This suggests that the public sector is best equipped to offer confirmation testing and ART services throughout their sites; the private sector is also well-equipped to offer these services: 84.9 percent of private sector clients were referred back to the original private sector site for follow-up care services.

TABLE 10: FOLLOW-UP AND REFERRAL PROCEDURES

Follow-up	NGO	Private	Public	Mission	Unknown	P-value
During this visit, client was referred for follow-up care to the CT site						
Yes	63.8	94.1	76.5	66.5	88.9	0.00
No	36.2	5.9	23.6	33.5	11.1	

Counselor gave card, slip or piece of paper to remind client of follow-up referral (among those who were referred for follow-up care)						
Yes	80.2	88.8	67.7	68.8	62.5	0.00
No	19.8	11.3	32.3	31.3	37.5	
Referred for follow-up at this site or at a different site (among those who were referred for follow-up care)						
Same site	62.0	84.9	96.2	94.7	75.0	0.00
Different site	38.0	15.2	3.8	5.3	25.0	

3.8 OVERALL LEVELS OF CLIENT SATISFACTION

There were no significant differences in levels of overall satisfaction between clients across the four sectors. Nearly 95 percent of all clients were "very satisfied" or "satisfied" with the services they received at their VCT site. However, there were significant differences in client willingness to recommend their VCT site to others. 98.6 percent of clients in the NGO sector would recommend their VCT site to others, while 87 percent of clients in the private sector would recommend their VCT site to others. Still, the overall rates of satisfaction and willingness to recommend their site were extremely high across all clients and sectors.

TABLE 11: LEVELS OF CLIENT SATISFACTION AND WILLINGNESS TO RECOMMEND SITE TO OTHERS

	NGO	Private	Public	Mission	Unknown	P value
Overall client satisfaction %						
Overall client satisfaction with services received at this CT site						
Very satisfied	71.0	71.5	65.9	92.7	61.1	0.39
Satisfied	29.0	25.0	25.9	3.5	27.8	
Undecided	0.0	2.4	4.4	0.0	5.6	

	NGO	Private	Public	Mission	Unknown	P value
Overall client satisfaction %						
Not satisfied	0.0	1.2	2.1	3.8	5.6	
Very unsatisfied	0.0	0.0	1.8	0.0	0.0	
Recommend site to others						
Recommend others to come for testing at this CT site						
Yes	98.6	87.0	90.6	92.7	88.9	0.04
No	0.0	9.5	9.4	7.3	11.1	
Don't know	0.0	3.5	0.0	0.0	0.0	
No response	1.4	0.0	0.0	0.0	0.0	

3.9 FUTURE INTENTION FOR BEHAVIOR CHANGE

Since this study was not longitudinal, we could not determine whether or not clients changed their sexual behavior or reduced risk for HIV transmission following their VCT services. However, we did measure the *intention* of clients to change their behavior and/or retest for HIV following their VCT session.

Table 12 shows that there were not many significant differences across sectors in terms of clients' intention to change behavior. Positively, most clients across all sectors self-reported an intention to test for HIV again in the next 12 months. Relatively few clients intended to reduce their number of sexual partners in the future; this number was only 9.6 percent for private sector clients. More than 60 percent of clients intended to use condoms in the future and more than 60 percent of clients overall were counseled about condom usage. It is not surprising that fewer than 10 percent of clients intended to disclose their HIV test results to potential partners, given the lack of counseling across the sectors relating to this key risk reduction method.

Clients were asked in two different ways whether or not they intended to test again for HIV in the next 12 months. First, clients were asked in a separate question about their intention to re-test; second, clients were asked about their intention as one of six behavior-change-linked questions. This variable is particularly important, since HIV-negative clients should re-test on a regular basis to monitor their status. Clients often visit VCT sites during a suspected high-risk period, and they would require regular testing to confirm an initial HIV-negative result.

Clients answered the questions about test intentions in significantly different ways. When asked a separate question about intention to retest, 92 percent of clients reported that they intended to retest within 12 months. However, when asked about intention to re-test imbedded within a series of other behavioral change variables, only 44.6 percent of clients reported that they intended to re-test for HIV.

This finding suggests that clients report dramatically different levels of intention to re-test within the same survey, depending on how the question is asked.

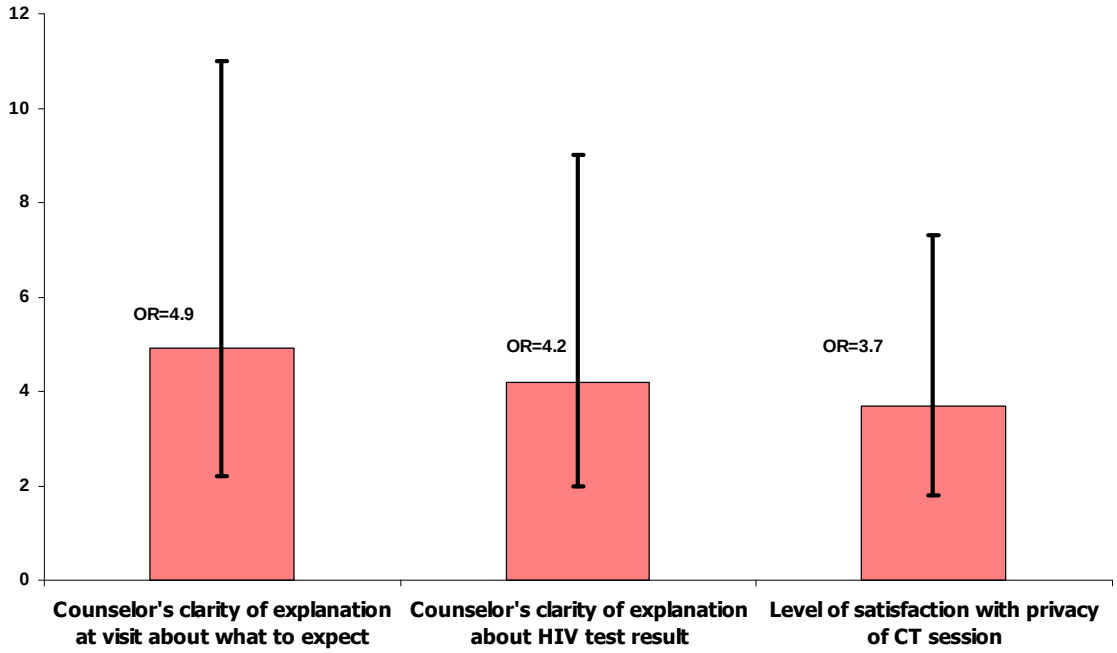
TABLE 12: BEHAVIOR CHANGE INDICATORS

Future test intention	NGO	Private	Public	Mission	Unknown	P value
Intention to test for HIV again in the next 12 months						
Yes	98.7	88.2	92.6	88.0	100.0	0.28
No	0.9	9.5	5.6	12.0	0.0	
Don't know	0.4	2.4	0.9	0.0	0.0	
No response	0.0	0.0	0.9	0.0	0.0	
Likely to follow-up						
Likely to follow-up at referred facility	100.0	96.3	93.1	76.7	93.8	0.10
Future behavior change						
Reduce number of partners	25.1	9.6	25.0	17.9	11.1	0.01
Use condoms	62.9	57.1	56.7	75.9	66.7	0.49
Be faithful	45.4	44.0	58.0	57.6	72.2	0.04
Get re-tested for HIV	33.2	53.5	43.0	48.9	44.4	0.24
Disclose results	3.6	2.4	1.8	7.1	11.1	0.14
Encourage others to test	28.3	32.0	30.9	22.7	11.1	0.31

3.10 ASSOCIATION BETWEEN CLIENT SATISFACTION AND QUALITY

Figure 4 shows a statistically significant association between client satisfaction with VCT services and a select few quality variables.[1] As more than 90 percent of clients reported being either very satisfied or satisfied with the overall service, we used *very satisfied* or *not satisfied* with overall services provided as the dependent variable. Using the logistic regression model, we examined which independent variables are significantly associated with *very satisfied*. Only three variables had significant associations: *counselor's clarity of explanation at visit about what to expect; counselor's clarity of explanation about HIV test result;* and *level of satisfaction with privacy of VCT session*. This finding is noteworthy as it excludes several independent variables as not significantly associated with client satisfaction, such as whether the client paid for service, and waiting time for HIV test result. The clarity of the counselor's explanations (of the purpose of the VCT session and of the HIV test result) appears to be of particular importance to client satisfaction.

FIGURE 4: ASSOCIATION BETWEEN QUALITY VARIABLES AND CLIENT SATISFACTION



3.11 RURAL AND URBAN DIFFERENCES

A similar number of clients from the public sector were interviewed from Copperbelt and Luapula—71 clients from Copperbelt and 66 from Luapula. This similar distribution allows us to examine whether the quality of VCT services differs between the urban public sector and the rural public sector. All other

[1] Only coefficients of explanatory variables significant at the 5 percent level are presented. Adjustments were also made for a number of other variables: province, age of client, whether the client paid for service, whether the counselor provided detailed information, whether the site was clean, time spent in session with counselor, time waited to hear results, whether the client felt comfortable asking the counselor questions, and whether the client was referred for follow-up care at the same VCT site. The Odds Ratios for these variables are not shown because of non-significant associations with the dependent variable.

findings, as presented in the preceding sections, do not show significant differences between urban and rural quality indicators.

For public sector clients, there was only one significant difference between the urban and rural sites. 83 percent of Copperbelt clients reported receiving a very clear explanation of HIV test results, while only 59 percent of Luapula clients reported a very clear explanation. There were no significant differences between the urban and rural province in counseling in two key risk reduction methods: partner reduction, and disclosing HIV test results to partners. Both urban and rural facilities underperformed in this regard.

TABLE 13: PUBLIC SECTOR URBAN AND RURAL DIFFERENCES IN QUALITY

	Copperbelt (urban)	Luapula (rural)	P value
Very clear explanation of test results	83%	59%	0.04
Discussed reducing # of partners	30%	35%	0.57
Discussed disclosing results to partner	6%	3%	0.49

4. FACILITY LEVEL FINDINGS

This section presents findings about facility quality based on: interviews with facility managers; reviews of CT service statistics at each facility; and observations of the VCT environment at each facility. These findings are instructive in understanding differences in the structural elements of VCT quality across sectors.

4.1 CLIENT LOAD

Table 14 shows differences in client load rates across the sectors. This data set was compiled by reviewing the service statistics for the last complete month in each facility visited; data were verified during the interview with the facility manager. There are no significant differences between sectors in the mean number of clients visiting each facility for HIV VCT services. However, NGO sites have by far the highest percentage of clients visiting for VCT services, which suggests that NGO sites offer the most specialized HIV services as opposed to general medical services. Public sites in our sample had the lowest mean number of clients visiting specifically for HIV VCT.

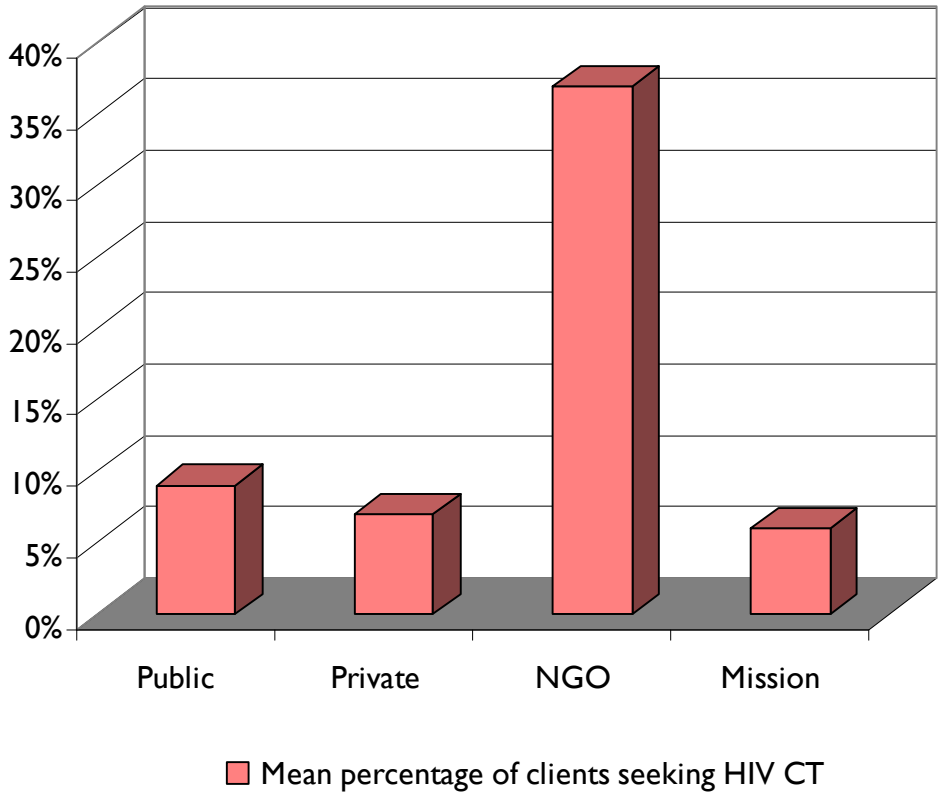
TABLE 14: CLIENT LOAD RATES BY SECTOR

Client load	Public N=38	Private N=29	NGO N=14	Mission N=6	P value*
Mean # clients per month coming for HIV VCT	53	58	99	98	0.43
Mean # outpatients per month coming for all health services	603	829	267	1526	0.05

*Since facilities were selected in proportion to their distribution in each province, we feel that it is valid to run a p-test for significance between the sectors. We acknowledge, however, that the number of cases for the NGO and Mission sectors is below the gold standard of 25 cases.

Figure 5 shows the percentage of clients seeking VCT services by sector. The NGO sector attracts the highest percentage of clients seeking VCT compared to other health services (36 percent). Fewer than 10 percent of clients in the three other sectors visit facilities for VCT services.

FIGURE 5: MEAN PERCENTAGE OF CLIENTS SEEKING HIV VCT BY SECTOR



There are significant differences across the sectors in the mean number of outpatients visiting each facility for all health services. Mission sites showed the highest overall client load, with an average of 1,526 clients per month; NGO sites were significantly less busy, with an average of 267 clients per month. Private sector facilities had the second highest monthly client load, with an average of 829 clients.

4.2 FACILITY-REPORTED FEES FOR SERVICE

We asked facility managers to report the fee charged per client for VCT services. Table 15 shows that 31 percent of private sector sites and 14 percent of NGO sites charged a fee. Mission and public sites provided VCT services for free. The mean fee was substantially higher ($5.35) in the private sector than in the NGO sector ($.03).

Clients reported paying OOP fees at a *lower* rate than facility managers reported. This discrepancy may have several explanations. First, employer-based insurance payments may cover the fees for some private sector sites. Second, some facilities may not collect fees from all clients at the point of service. In a further discrepancy, 4 percent of public sector clients reported paying for VCT services that are ostensibly free (see section 3.6). It may be that some facility staff members charge ad hoc for VCT services, even though the facility does not have a policy of charging. The discrepancies between the client-level and facility-level findings should be further explored.

TABLE 15: FEES FOR VCT SERVICE BY SECTOR

Payment for services	Public N=38	Private N=29	NGO N=14	Mission N=6
% facilities with fee for HIV CT	0%	31%	14%	0%
Fee (kwacha)	NA	%5.351	$0.032	
Mean % clients who pay fee for HIV CT		20%	9%	

[1] Fee: max =3 with 200,000 kwacha, 1 with 100,000 kwacha; median=0, mode=0
[2] Fee: max=1000 kwacha; median=0; mode=0

4.3 KEY HIV SERVICE STATISTICS

Table 16 shows results of a review of key HIV service statistics at each facility. In the private sector, on average, 165 clients per month received HIV post-test counseling and a test result, while in the public sector only 59 clients per month on average did so. This finding suggests that the private sector is well utilized for VCT services by clients, who tend to stay to receive their HIV test result. The private sector also had the lowest percentage of HIV-positive clients, with 13 percent testing positive.

In the public sector, during the month under review by the team of data collectors (March 2009), a full 30 percent of clients tested positive for HIV. Thus, although the public sector had the lowest number of clients receiving post-test counseling and a HIV test result, it had the highest percentage of HIV-positive clients. These findings indicate that there may be a considerable difference in the HIV risk profile between clients accessing the public and private sectors for VCT in Copperbelt and Luapula.

TABLE 16: KEY HIV SERVICE STATISTICS BY SECTOR

Counseling & Testing	Public N=38	Private N=29	NGO N=14	Mission N=6	P value
# clients post-test counseled AND received results[1]	59	165	113	125	0.59
# of all clients testing HIV positive	18	21	21	25	0.06
% testing HIV positive	30%	13%	18%	20%	NA
% sites for which data includes mobile CT	3%	8%	21%	17%	

[1] During the month under review (March 2009)

4.4 PHYSICAL INFRASTRUCTURE FOR VCT

Data collectors observed the physical infrastructure for VCT at each site and scored the infrastructure against the requirements listed in the National Guidelines. Physical environment components include several variables: the number of rooms available for VCT; the number of VCT rooms with HIV

screening and confirmation test kits; and the number of VCT rooms with supportive equipment, including lancets, sharps disposal boxes and latex gloves.

Table 17 shows that there are very few significant differences between sectors in the physical environment for VCT. The only significant difference between sectors relate to the mean percentage of VCT rooms with lancets: the mission sector has the highest percentage (86 percent) and the public sector the lowest (41 percent). The private sector has the highest number of rooms available for VCT, with an average of 2 VCT rooms. The ranges listed in Table 17 show that there were cases where public sites had zero rooms dedicated to VCT, although VCT was performed.

TABLE 17: PHYSICAL INFRASTRUCTURE FOR VCT BY SECTOR

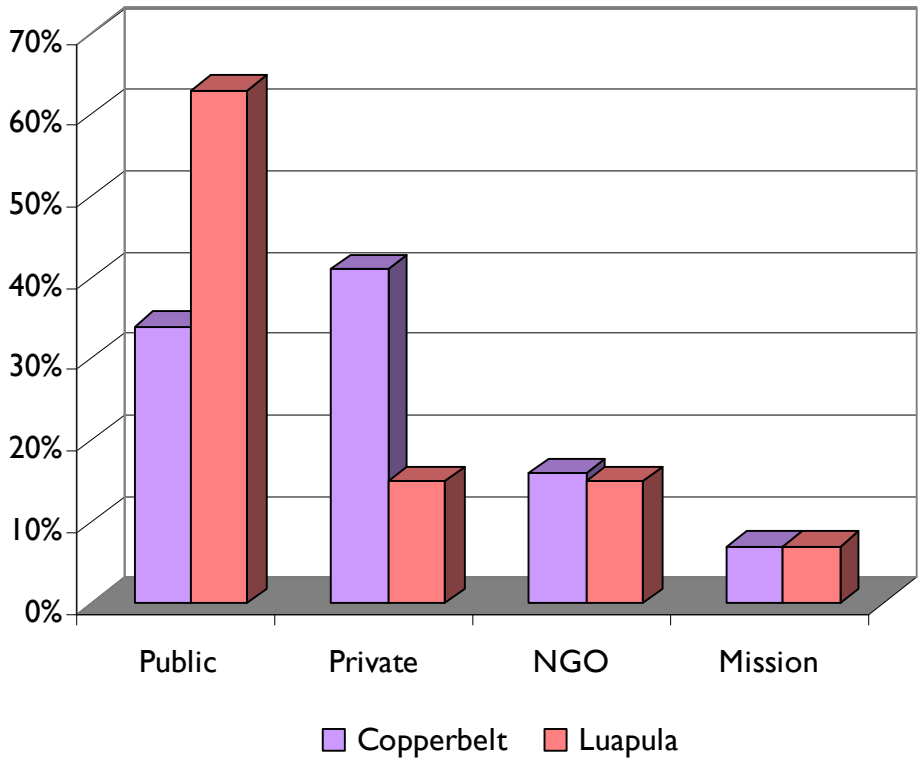
Infrastructure	Public N=38	Private N=29	NGO N=14	Mission N=6	P value
Mean # rooms available for CT	1.5 (0,6) [1]	2.0 (1,10)	1.9 (1,5)	1.5 (1,3)	
Mean % of rooms with HIV test kit #1 (screening test) - Determine	75 %	78 %	92 %	86 %	0.12
Mean % of rooms with HIV test kit #2 (confirmation test) – Genie II or Unigold	69 %	59 %	77 %	86 %	0.29
Mean % of rooms with HIV test kit #3 (tie-breaker test) - Bionor	4%	16 %	23 %	14 %	0.33
Mean % of rooms with lancets	41 %	64 %	54 %	86 %	0.09

[1] Range in parentheses

4.5 RURAL AND URBAN DIFFERENCES

Figure 6 illustrates the distribution of sampled facilities by sector and province. This distribution includes all facilities where facility managers were interviewed and service statistics reviewed, even if no clients were available for interviewing or no HIV testing had been performed.

FIGURE 6: FACILITY SAMPLE DISTRIBUTION BY SECTOR AND PROVINCE



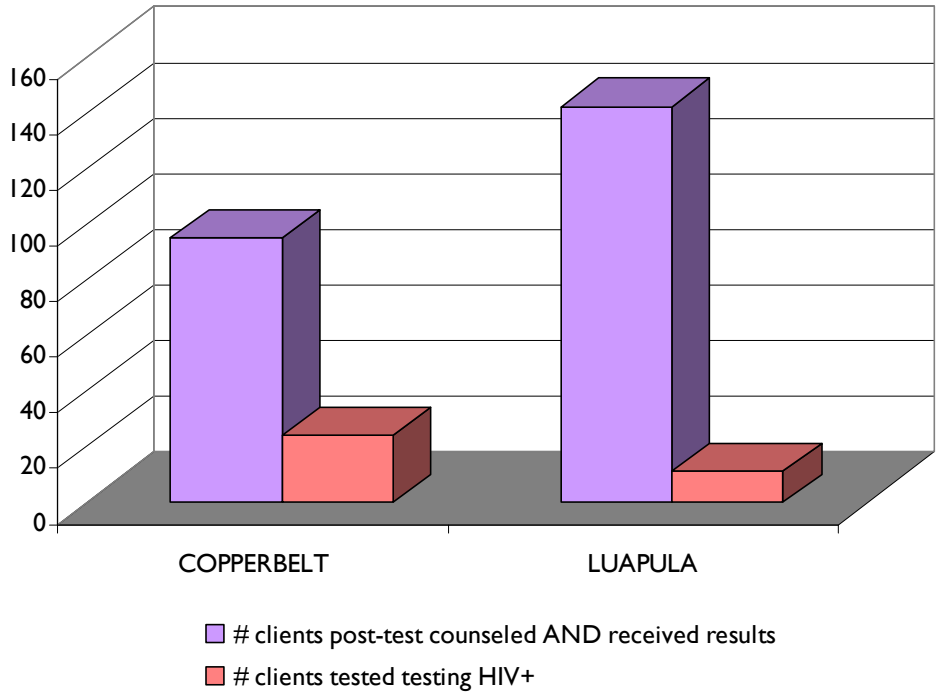
We examined the key facility-level indicators to determine if there were significant differences in quality between the urban and rural settings. Table 18 shows that there is no significant difference in average client load between Copperbelt and Luapula. More noteworthy is the overall similarity between the two provinces in the mean average number of clients visiting the facilities, for both VCT and other health services.

TABLE 18: CLIENT LOAD RATES BY PROVINCE

Client load	Copperbelt n=61	Luapula n=27	P value
Mean average # of clients per month coming to facility for HIV counseling and testing	68	66	0.94
Mean # of outpatients per month coming to facility for all health services	702	629	0.73
Mean % clients who seek HIV CT	10%	10%	

However, Figure 7 indicates that there are significant urban/rural differences in the number of clients testing positive for HIV (p=.06). In the month under review, 24 percent of Copperbelt clients but only 11 percent of Luapula clients tested HIV-positive. This finding confirms the 2007 ZDHS prevalence figures showing higher urban HIV-positive rates, although the spread in our findings is wider than in the ZDHS.

FIGURE 7: HIV-POSITIVE AND TESTING LEVELS BY PROVINCE



There are also significant urban/rural differences regarding fees charged for the VCT service. Table 19 shows that 16 percent of facilities charge for VCT in the Copperbelt, as opposed to only 4 percent of facilities in Luapula. 11 percent of clients pay for VCT in Copperbelt, while only 2 percent pay in Luapula. This finding likely reflects the higher number of private sites in Copperbelt. It is noteworthy, however, that the great majority of clients in the study did *not* pay for VCT services. It is likely that financial barriers are not a major challenge to increasing uptake of VCT in Zambia.

TABLE 19: FEES CHARGED FOR VCT BY PROVINCE

Payment for services	Copperbelt n=61	Luapula n=27	P value
% facilities with fee for HIV CT	16%	4%	0.09
Fee (kwacha)	11475	37	0.03
Mean % clients who pay fee for HIV CT	11%	2%	

Finally, there are only slight differences in the physical environment for VCT between Copperbelt and Luapula. Table 20 shows that there are marginally significantly more rooms for VCT in Copperbelt (1.9) than there are in Luapula (1.5), but there are no other significant differences in the physical environment for VCT between the provinces. Taken together, these findings suggest that there are not significant differences in VCT quality or client load between the urban and rural province, in spite of the significant differences in HIV prevalence.

TABLE 20: PHYSICAL INFRASTRUCTURE FOR VCT BY PROVINCE

Infrastructure for CT	Copperbelt n=61	Luapula n=27	P value
Mean # rooms available for CT	1.9	1.5	0.09
Mean % of rooms with HIV test kit #1 (screening test)	80%	75%	0.56
Mean % of rooms with HIV test kit #2 (confirmation test) – Genie II or Unigold	65%	75%	0.35
Mean % of rooms with HIV test kit #3 (tie-breaker test) - Bionor	11%	14%	0.7
Mean % of rooms with lancets	56%	48%	0.51

5. DISCUSSION AND RECOMMENDATIONS

5.1 DISCUSSION

The study findings offer valuable information about the quality of VCT services across all four health sectors in Copperbelt and Luapula. This study provides the first systematic assessment of VCT quality of the private for-profit sector in Zambia. Three dimensions of quality are examined —structural, process, and outcome; and new information is presented about the profiles of clients accessing services in facilities across all the sectors. Including client and facility data, along with both qualitative and quantitative measures, adds a high level of nuance, detail, and cross-cutting assurances to our findings. These findings, taken together, offer detail about all four main categories of health facilities in these two provinces of Zambia, and may prove useful for generating recommendations about greater collaboration and coordination between the sectors.

The study describes the main profiles and examines the motivations of clients in each sector. Geographic proximity and the cost of transportation are important factors for clients in selecting a facility; the specialized reputations of NGO facilities are another important factor for clients who seek VCT at sites known for HIV services. These factors trump OOP fees for service and a desire to avoid stigma as a motivator for choosing a sector. However, clients are drawn to the private sector because of its ability to offer high-quality general health services, in comparison with other medical sectors. This finding suggests that the private sector may be uniquely positioned to pilot more extensive integrated HIV services.

These findings help to dispel certain myths and misconceptions regarding VCT services in Zambia. No one sector emerges as providing overwhelmingly higher quality services than another; and, overall, rural sites perform on par in quality with the urban sites. However, the findings reveal less than optimal counseling practices across the sectors. The study findings can be used by the MOH and USAID/Zambia to improve training curricula and ongoing supportive supervision of VCT.

Most importantly, this study significantly contributes to the evidence base by documenting and quantifying both the extent of VCT provision by the private for-profit sector and the quality of that provision. Study findings also contribute to filling gaps in the literature about VCT in general, including methodological challenges, measuring the quality of VCT against an established framework and gauging the utility of client satisfaction as a measure of quality.

5.1.1 FUTURE RESEARCH AREAS

These findings suggest a number of areas that warrant future research. Future studies can evaluate VCT quality by type of private sector and distinguish quality levels between workplace sites, large private hospitals, and smaller private providers. While our sample included all of these types of facilities, sample sizes are not large enough to significantly evaluate and compare quality within the private sector. Additionally, the findings call for further research into **why** key risk reduction methods to prevent HIV transmission within multiple, concurrent sexual partnerships are not widely discussed by counselors during VCT sessions in any of the sectors. Possible explanations could include diluted, out-of-date and

conflicting messages about HIV transmission communicated to counselors during trainings; a lack of acceptance about the risks of concurrency in Zambia; or insufficient time allocated by counselors during VCT sessions. Given recent attention and calls for integration of VCT with other health services, efforts should be made to ensure that concurrency is addressed during VCT, even when other services are introduced and integrated.

Finally, we examined the profile of clients utilizing VCT services across all four sectors. Future research should address the profile and motivations of counselors providing VCT services to examine which counselor characteristics (e.g., years of experience, recent trainings, salary or education levels) may influence quality and to better understand how private providers are able to perform VCT services on par in quality with the other sectors.

5.2 RECOMMENDATIONS

5.2.1 REFINE COUNSELING GUIDELINES AND TRAINING CURRICULA

Both qualitative and quantitative data from all four sectors revealed serious underperformance in counseling about key risk reduction methods, including sexual partner reduction and disclosure of HIV test results to partners. While most counselors are addressing condom usage during pre- and post-test counseling sessions, there is little evidence of a widespread effort to address either the situation of multiple, concurrent sexual partnerships or the necessity to disclose HIV test results to sexual partners. In addition, many clients reported receiving inappropriate counseling messages regarding HIV transmission that emphasize needle exchange, blood contact, or tattoos. Counseling guidelines and training curricula should be reviewed and revised to incorporate important messages about all facets of risk reduction, including the risks of multiple, concurrent sexual partnerships. In November 2009, Rupiah Banda, President of Banda, publicly stated that "multiple, concurrent partnerships are the leading cause of HIV infection in Zambia (PlusNews 2009)." Thus, the content of VCT sessions in Zambia must address the risks of concurrency.

5.2.2 REDUCE RELIANCE ON CLIENT SATISFACTION AS A MEASURE OF QUALITY

Study results showed that the vast majority of clients, across sectors and provinces, were very satisfied with all facets of their VCT services. However, an examination of the literature shows that client satisfaction measures, particularly in the developing world, can be an unreliable gauge of quality: clients are prone to over-report feelings of satisfaction to appeal to the data collectors or the facility itself; they may have low expectations or little experience of high-quality services; and they may focus on extreme negative experiences instead of gauging quality against a nuanced scale. Furthermore, client satisfaction measures for VCT—particularly when clients receive an emotionally taxing HIV-positive diagnosis—may be even more unreliable or prone to emotional input. While client satisfaction is an important measure of how likely a client may be to return to a facility for services (an important indicator of future likelihood to re-test for HIV), it should not be conflated as a measure for VCT quality. Furthermore, qualitative data from the study showed that clients likely associate interpersonal dimensions of counseling like friendliness, approachability, and niceness with high levels of satisfaction. These interpersonal factors are important for establishing client-counselor rapport, but do not necessarily indicate high-quality counseling.

5.2.3 FURTHER TEST THE RELATIONSHIP BETWEEN SURVEY WORDING AND CLIENT RESPONSES

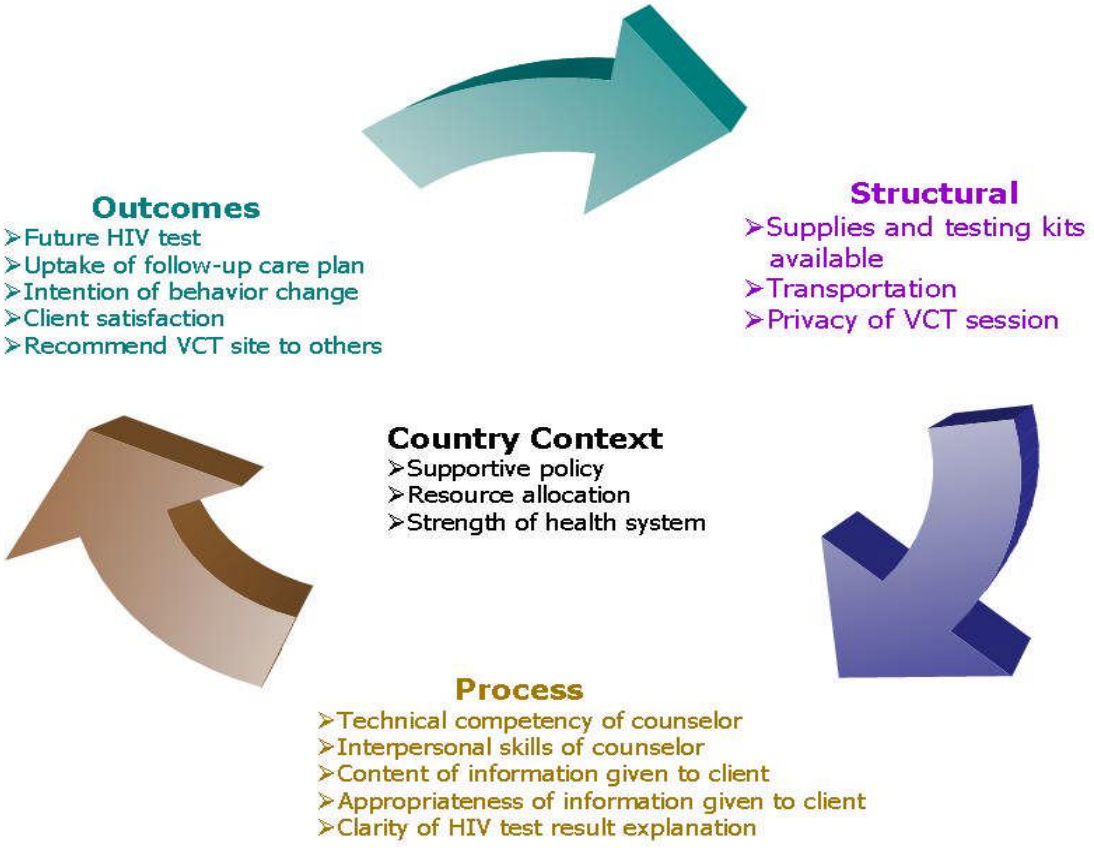
We asked clients two questions about their intention to re-test for HIV over the next 12 months. In the first stand-alone question, 99 percent of NGO clients stated they intended to re-test for HIV in the next 12 months. In a subsequent question addressing multiple behavior change intentions, only 33.2 percent of NGO clients stated they intended to re-test for HIV. There are similar disparities in the other sectors. This large disparity suggests that clients may shape responses to conform to perceived data collector expectations, when the question is focused on one specific variable in isolation.

Given the high stakes attached to improving the quality of VCT and other HIV services, much more research should be undertaken to better understand the psychological dimensions of data collection for clients, particularly in the context of a generalized epidemic. A set of "best practice" VCT quality questions would help researchers establish consistent quality standards across countries.

5.2.4 DEVELOP AND TEST A FRAMEWORK FOR UNDERSTANDING VCT QUALITY

We used Donabedian's quality framework as a guide to understand the theory behind gauging quality. However, though this framework has been tested extensively in family planning services, it has not been tested as extensively for VCT or HIV services. Below is a modified framework for understanding VCT quality based on our experience in Zambia. This framework should be further refined and tested to explore whether it is an adequate theoretical framework for understanding the elements of VCT quality in other settings.

FIGURE 8: FRAMEWORK FOR UNDERSTANDING VCT QUALITY



5.2.5 INCORPORATE THE PRIVATE FOR-PROFIT SECTOR AS A QUALIFIED PROVIDER OF VCT SERVICES

Our results show that the private for-profit sector provides VCT services on par with the other sectors, and that, for certain quality indicators, surpasses the other sectors. This body of findings is especially noteworthy given that private providers are not incorporated into public sector training opportunities about VCT and were less involved in creating the National Guidelines for VCT.

Prior to launching this study, very little was known about the role of the private sector in providing VCT services. We now know that private providers do provide VCT at comparable rates and often experience high client load. Overall, in our study, *more clients received post-test counseling and HIV test results in the private sector than in any other sector*. These findings suggest that the MOH and USAID/Zambia should look to maximize the contributions of the private sector and should view this sector as an important resource for the country in meeting the pressing needs of HIV prevention. By further incorporating this important sector into training, planning, and operationalizing HIV strategies, Zambia will be better able to offer high-quality VCT services to a greater number of Zambians.

ANNEX A: FINAL SURVEY INSTRUMENTS (ENGLISH)

The Bemba versions of these instruments are available upon request. If you would like to receive a copy, please email: info@psp-one.com.

EpiSurveyor Version of Client Exit Interview

Survey Name: FINALClientPretest
No of Questions: 50
==========
=

1: Introduce yourself to the client and explain to the client that you would like to interview them about their experience with HIV CT at the facility. Confirm that he/she did receive an HIV test today before proceeding with the interview. (label)

2: Did the client sign the informed consent form? (multi)
Data Field Name: consent
Potential Responses:
- Yes
- No

3: Province (multi)
Data Field Name: province
Potential Responses:
- Copperbelt
- Luapula

4: Counseling and Testing Site Number (free)
Data Field Name: CTnumber

5:Client Identification Number (free)
Data Field Name: clientID

6:Date (date)
Data Field Name: date

7:1. Gender (multi)
Data Field Name: q1_gender
Potential Responses:
- Male
- Female

8:2. In what month were you born? (multi)
Data Field Name: q2_month
Potential Responses:
- January
- February
- March
- April
- May
- June
- July
- August

- September
- October
- November
- December
- Don't know
- No response

9:2. In what year were you born? (Enter 88 if don't know and 99 if no response) (free)
Data Field Name: q2_year

10:3. Was this your first time receiving an HIV test? (multi)
Data Field Name: q3_priortest
Potential Responses:
- Yes
- No
- Don't know

11:3b. How many tests have you previously received? (If don't know, enter 88; if no response, enter 99.) (free)
Data Field Name: q3b_numtest

12:4a. How much time [in minutes] did you spend waiting to see your counselor? (If don't know, enter 88; if no response, enter 99.) (free)
Data Field Name: q4a_time_wait

13:4b. How much time [in minutes] did you spend in your session with your counselor before and during your HIV test? (If don't know, enter 88; if no response, enter 99.) (free)
Data Field Name: q4b_time_test

14:4c. How much time [in minutes] did you spend waiting for your HIV test result? (If don't know, enter 88; if no response, enter 99.) (free)
Data Field Name: q4c_time_result

15:4d. How much time [in minutes] did you spend speaking with your counselor after you received your HIV test result? (If don't know, enter 88; if no response, enter 99.) (free)
Data Field Name: q4d_time_after

16:5. How clearly did the counselor explain what to expect during your visit at the CT site? (multi)
Data Field Name: q5_visit
Potential Responses:
- Very clearly
- Clearly
- Undecided
- Unclearly
- Very unclearly
- No response

17:6a. How comfortable did you feel talking to your counselor about your sexual history? (multi)

Data Field Name: q6a_comfort_hx
Potential Responses:
- Very comfortable
- Comfortable
- Undecided
- Uncomfortable
- Very uncomfortable
- No response

18:6b. How comfortable did you feel talking to your counselor about your HIV test result? (multi)
Data Field Name: q6b_comfort_dx
Potential Responses:
- Very comfortable
- Comfortable
- Undecided
- Uncomfortable
- Very uncomfortable
- No response

19:6c. How comfortable did you feel talking to your counselor about ways to reduce your risk? (multi)
Data Field Name: q6c_comfort_risk
Potential Responses:
- Very comfortable
- Comfortable
- Undecided
- Uncomfortable
- Very uncomfortable
- No response

20:6d. How comfortable did you feel talking to your counselor about follow-up services needed? (multi)
Data Field Name: q6d_comfort_fu
Potential Responses:
- Very comfortable
- Comfortable
- Undecided
- Uncomfortable
- Very uncomfortable
- No response

21:7. Did you feel comfortable asking your counselor questions? (multi)
Data Field Name: q7_quest
Potential Responses:
- Yes
- No
- Don't know
- Not applicable
- No response

22:8. Did your counselor answer your questions with enough detail? (multi)
Data Field Name: q8_detail
Potential Responses:
- Yes
- No
- Don't know
- Not applicable
- No response

23:9. How prepared did you feel to receive your results after your counselor spoke with you about HIV? (multi)
Data Field Name: q9_prep
Potential Responses:
- Very prepared
- Prepared
- Undecided
- Unprepared
- Very unprepared
- No response

24:10. How clearly did the counselor explain your HIV test results to you? (multi)
Data Field Name: q10_results
Potential Responses:
- Very clearly
- Clearly
- Undecided
- Unclearly
- Very unclearly
- No response

25:11. Which methods for reducing your exposure to HIV did you discuss with your counselor? (Interviewer: please check all options on the next screen that apply, but do not prompt respondent.) (label)

26:Methods: (multi)
Data Field Name: q11_method
Potential Responses:
- Reduce number of partners
- Use condoms
- Be monogamous/faithful
- Disclose results to partner
- Encourage partner to test
- Abstain from sex
- Did not discuss risk reduction
- Other (specify next screen)

27:If respondent answered OTHER to the previous question, please specify the method. (free)
Data Field Name: q11_other

28:12. Will you recommend others to come for testing at this CT site? (multi)
Data Field Name: q12_recommend
Potential Responses:
- Yes
- No
- Don't know
- No response

29:13. Do you intend to be tested for HIV again in the next 12 months? (multi)
Data Field Name: q13_12mos
Potential Responses:
- Yes
- No
- Don't know
- No response

30:14. Overall, how satisfied were you with the services you received at this CT site? (multi)
Data Field Name: q14_service
Potential Responses:
- Very satisfied
- Satisfied
- Undecided
- Not satisfied
- Very not satisfied
- No response

31:15. How satisfied were you with the privacy of the CT session? (multi)
Data Field Name: q15_privacy
Potential Responses:
- Very satisfied
- Satisfied
- Undecided
- Not satisfied
- Very not satisfied
- No response

32:16. How clean were the counseling and waiting rooms at the CT site you visited? (multi)
Data Field Name : q16_clean
Potential Responses:
- Very clean
- Clean
- Undecided
- Not clean
- Very not clean
- No response

33:17. How do you think you will change your behavior since receiving your HIV test result? (Interviewer: please check all that apply on the next screen, but do not prompt respondent.) (label)

34:Behaviors: (multi)
Data Field Name: q17_change
Potential Responses:
- Reduce number of partners
- Use condoms
- Be monogamous/faithful
- Get re-tested for HIV
- Disclose results
- Encourage others to test
- I am not planning to change.
- Other (specify next screen)

35:If respondent answered OTHER for previous question, specify behavior change. (free)
Data Field Name: q17_other

36:18. Were you referred for follow-up care during this visit to the CT site? (multi)
Data Field Name: q18_refer
Potential Responses:
- Yes
- No
- Don't know
- No response

37:19. What was the name of the facility to which you were referred? (Write 'don't know' or 'no response' if needed) (free)
Data Field Name: q19_where

38:20. Were you referred for follow-up at this site or at a different site? (multi)
Data Field Name: q20_site
Potential Responses:
- Same site
- Different site
- Don't know
- No response

39:21. How likely are you to visit the service/facility to which you were referred? (multi)
Data Field Name: q21_likely
Potential Responses:
- Very likely
- Likely
- Undecided
- Unlikely
- Very unlikely
- No response

40:22. Did your counselor give you a card, slip, or piece of paper to remind you of your follow-up or referral? (multi)
Data Field Name: q22_paper
Potential Responses:
- Yes
- No
- Don't know
- No response

41:Now I would like to ask you a few questions about your travel arrangements, background, and living situation. (label)

42:23. How did you travel to this CT site? (multi)
Data Field Name: q23_travel
Potential Responses:
- Walked
- Took public bus/minibus
- Used personal car
- Taxi
- Bicycle
- Other
- No response

43:If respondent answered OTHER to the previous question, please specify how they traveled to the CT site? (free)
Data Field Name: q23_other

44:24. How long [in minutes] did it take you to travel to the CT site? (multi)
Data Field Name: q24_travel
Potential Responses:
- Less than 30
- 30 minutes-1 hour
- 1-2 hours
- 2-3 hours
- More than 3 hours
- Don't know
- No response

45:25. How much did you pay for transport to this CT site [in kwacha]? (Enter 0 if did not pay; enter 99 if no response.) (free)
Data Field Name: q25_trans_cost

46:26. How much did you pay [in kwacha] for your services at this CT site today? (Enter 0 if did not pay; enter 99 if no response.) (free)
Data Field Name: q26_cost

47:27. What is the highest level of school that you attended? (multi)
Data Field Name: q27_school
Potential Responses:
- None

- Primary
- Secondary
- Higher than secondary
- Don't know
- No response

48:28. To what social stratum would you say your household belongs? (multi)
Data Field Name: q28_social
Potential Responses:
- Lower
- Middle
- Upper
- Don't know
- No response

49:I would now like to read a few questions aloud. I will write your responses down on a piece of paper. (label)

50:Interviewer, please read: Thank you for your time. (label)

Open-Ended Client Exit Interview

Province: _____

Date:_____/_____/_____

CT Site Number: ____ ____ ___

Client Identification Number: _____ ***(same ID number as PDA client number)***

Open-Ended Questions [*Read aloud to client and transcribe responses*]:

1. **What new information did you learn today about HIV? Please describe.**
Fintunshi ifipya/ lyashinshi Ilipya efyo musambililepo lelo pakashishi ka HIV? Ndemiloma ukuti mulondolole.

2. **Why did you decide to come for counseling and testing at this site? [*PROBE: Quality? Convenience? Hours of operation? Privacy? Friendliness of staff? Comfort? Been to this site before?*] *NOTE: Do not probe respondent at first. Allow respondent to present own ideas first.***

Bushe cinshi ichalengele ukuti mwise pano nchende mukulanda namukupimisha akashishi ka HIV?
[Ipukishisheni ngachakuti mulandu wakweba ati epaipipa? Inshita babombelapo? Balasunga inkama? Ababomfi baliba abansansa? Kulaba ukwikala bwino? Limbi mwalisapo kale kuno?]

3. Do you plan to visit the site or services to which you were referred to? Why or why not? [*PROBE: Time? Distance? Cost? Don't want anyone else to know that I am seeking services for HIV? Privacy? Don't want to confront HIV status?*] *NOTE: Do not probe respondent at first. Allow respondent to present own ideas first.*

Bushe mulepanga ukuyapoka ubwafwilisho nangu ukuya kunchende eko bamitumine? Ninshi mukailako nangu nishi tamwakaileko? *[Ipukishisheni: Nga ninshita? Intamfu yakwenda? Impiya yakubomfya? Takwaba nkama? Nshilefwaya ukwishiba ngandi nakashishi nangu iyo?]*

Facility Assessment Form

Province *(tick)*: □Copperbelt □Luapula

Facility Name: _____ **CT Site Number:** __ __ __

Date: Month_____ Day _____ Year _____

Section A: Questions for Facility Manager/In-Charge	
1. Name of Person Interviewed	
2. Position of Person Interviewed	
3. What type of site is this? *(Ask manager)*	□Public □Private □NGO □Mission □Other _____
4. Average # of clients per month coming to facility for HIV counseling and testing	_____ (number) per month
5. Average # of outpatients per month coming to facility for all health services *(if the site also provides non-CT health services. If not, write N/A.*	_____ (number) per month
6. How many staff are there at the facility that provide health-related services? (exclude cleaning staff, guards, gardeners, CDEs)	____ part-time staff ____ full-time staff ____ volunteers
7. How many staff and community volunteers conduct HIV CT at this site?	____ part-time staff ____ full-time staff ____ volunteers
8. Is there a fee for HIV counseling and testing services? ***If no, skip to question 9.***	1 = Yes 2 = No
8a. If **yes**, how much?	Write-in [in kwacha]: _____
8b. What percentage of clients pay this fee? *Note for Interviewer: The facility manager should ESTIMATE this percentage.*	_____ (%)
9. Please describe the process you use to refer HIV+ clients to other services. Describe sites and services that you commonly refer HIV positive clients to. [*PROBE: public, private or NGO sites*] [*PROBE: Do you refer clients to this facility or to a different facility*?]	

10. Please describe the services you provide to HIV- clients. Describe sites and services that you commonly refer HIV negative clients to. [*PROBE: public, private or NGO sites*] [*PROBE: Do you refer clients to this facility or to a different facility*?]	
11. How do you know if your clients go to the services for which they are referred? Do you monitor this? If so, how?	
12. What other quality assurance methods do you have in place for your CT services? *PROBE:* Quality assurance methods include client exit interviews, using QA/QI information collected from monitoring tools, displaying a counseling checklist, supervising a counselor during a CT session, etc. *NOTE: Allow respondent to answer question first without probing.*	

13. Do you conduct external quality assurance for your HIV testing (i.e., send a subset of your tests to a referral laboratory for rechecking or conduct proficiency tests)? If yes, please describe.	
Section B: Data Review of HIV Counseling and Testing Register - *Please review the HIV CT register or other HCT data source to obtain the most recent completed month of data available at the site. You may need to review the CT register and summarize the data.*	
14. Does this site have a HIV counseling and testing register (or maintain records/data on HIV CT outside of individual patient files)? ***If no, skip entire section and proceed to Section C.***	1= Yes 2= No
15. Is this data/register paper-based or electronic?	1= Paper-based 2= Electronic
16. Month and year selected for data review:	_____/ _____ (month and year)
17. # clients pre-test counseled **during the month under review**	_____ (Number) 99= No Response
18. # clients pre-test counseled AND tested for HIV **during the month under review**	_____ (Number) 99= No Response
19. # clients post-test counseled AND received results **during the month under review.**	_____ (Number) 99= No Response
20. # of all clients tested (from question #18) testing HIV+ **during the month under review**	_____ (Number) 99= No Response
21. Does the data collected include mobile CT services as well? (Collect data for static service only if available).	1= Yes 2= No
Section C: Observations of CT Room(s)	
22. How many rooms are available for CT services at the site?	

	_____ (#) rooms			
		Room 1	Room 2	Room 3
23. Are these rooms used only for CT services?	1 = Yes 2 = No 3 = Other _____			
24. Does the CT room(s) have good lighting?	1 = Yes 2 = No			
25. Does the CT room(s) have adequate space?	1 = Yes 2 = No			
26. Is the CT room(s) well-ventilated?	1 = Yes 2 = No			
27. Does the CT room(s) provide privacy and confidentiality for the client?	1 = Yes 2 = No			
28. Is there water available for hand-washing in the CT room?	1 = Yes 2 = No			

29. Check and tick if the following supplies are available in the CT room(s):		Room 1	Room 2	Room 3
	HIV test kit #1 (screening test) - Determine			
	HIV test kit #2 (confirmation test) - Genie II or Unigold			
	HIV test kit #3 (tie-breaker test) - Bionor			
	Gloves			
	Alcohol/methylated spirit			
	cotton			
	lancets			
	sharps disposal/safety box for disposal of needles/lancets			
	at least 1 desk			
	at least 3 chairs			
	at least 1 lockable cabinet			
30. Are there information, education and communication (IEC) materials available on HIV/AIDS?	1 = Yes 2 = No			
31. Is there a waiting area for CT clients with chairs/benches?	1 = Yes 2 = No			
32. Describe the waiting area for CT clients. Please include in your description how many clients you think this waiting area can hold and describe the privacy of the room.				

To be completed by data collectors at the end of data collection (facility questionnaire tool and client exit interviews) at the facility.

_____ # of client exit interviews conducted (all, including incomplete records due to lack of consent)

_____ # of client consent forms collected

_____ # of open-ended client exit questionnaires completed

ANNEX B: BIBLIOGRAPHY

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