HIV Services Inventory Final Report

Sociobehavioral Research & Community Planning

to Develop Site-Specific Pilot Intervention Plans for PrEP Rollout

FEM-PrEP

SOSHANGUVE, PRETORIA, SOUTH AFRICA
JANUARY 2013

fhi360
THE SCIENCE OF IMPROVING LIVES

Setshaba Research Centre

USAID
FROM THE AMERICAN PEOPLE

FHI 360 and Setshaba Research Centre (2013). HIV Services Inventory Final Report, Soshanguve, Pretoria, South Africa. FHI 360: Durham, NC, USA.

This study was funded by the U.S. Agency for International Development (USAID). The contents of this report are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the U.S. Government. Financial assistance was provided by USAID under the terms of the Preventive Technologies Agreement (GHO-A-00-09-00016-00).

TABLE OF CONTENTS

Tables and Figures 2
Acronyms 3
Acknowledgments 4
Executive Summary 5
Introduction 8
Methods 11
Results 13
- Staff 13
- Outreach Workers 14
- Services Offered 14
- Voluntary Counseling and Testing (VCT) 17
- Provider-Initiated Testing and Counseling (PITC) 17
- Mobile HIV Testing (MBT) 17
- STI Testing and Treatment 18
- Male Circumcision (MC) 18
- Family Planning (FP) 18
- Prevention of Mother-to-Child Transmission (PMTCT) 19
- HIV Care and Treatment (ARVs) 19
- Home-Based HIV Care (HBC) 20
- Directly Observed Therapy (DOT) for ART 20
- HIV Support Groups (HSG) 21
- Other ART Adherence Support 21
- Community Education, Information, and Outreach (CEIO) 22
- Referrals 24
- Pharmacy 24
- Condom Distribution 25
- Voluntary Counseling and Testing/Provider Initiated HIV Testing and Counseling (VCT/PITC) 26
- Antiretroviral Drugs 26
- Counseling and Support Groups 26
- Funding 27
- Maps 28

Discussion 33
References 36

TABLES AND FIGURES

Table 1. Staff distribution at facilities 15

Table 2. Services offered by inventoried facilities and organizations 16

Table 3. Services offered by inventoried facilities 17

Table 4. Community education topics offered by facilities 25

Figure 1. Map of comprehensive facilities 31

Figure 2. Facilities by HIV testing and counseling services offered 32

Figure 3. Availability of FP, STI, and HIV services at the facilities 33

ACRONYMS

ARV	**Antiretroviral (therapy as part of HIV care and treatment)**
CEIO	**Community education, information, and outreach**
DOT	**Directly observed therapy (for taking ARVs)**
FP	**Family planning**
HBC	**Home-based HIV care**
HSG	**HIV support groups**
HTC	**HIV testing and counseling**
MBT	**Mobile HIV testing**
MC	**Male circumcision**
NGO	**Non-governmental organization**
NHLS	**National Health Laboratory Service**
PITC	**Provider initiated testing and counseling**
PEPFAR	**President's Emergency Plan for AIDS Relief**
PrEP	**Pre-exposure prophylaxis**
PMTCT	**Prevention of mother-to-child transmission**
STI	**Sexually transmitted infections**
USAID	**U.S. Agency for International Development**
VCT	**Voluntary counseling and testing**

Acknowledgments

The research that included the HIV services inventory was a collaboration between Setshaba Research Centre and FHI 360. We would like to thank all the respondents and organizations in and around Soshanguve who participated in the HIV services inventory. In addition, we would like to acknowledge the following contributors to the design, data collection, analysis, and write-up of the HIV services inventory:

Site research team: Dr. Khatija Ahmed, Ms. Vuyelwa Thokozile Mtimkulu, Ms. Kgahlisho Moroasui, Mr. Joseph Skhosana, Ms. Mary Jane Malebo Ratlhagana, Ms. Shumani Makatu, Mr. Steven Nicodemus Maubane, Mr. Panuel Kunene, Ms. Muriel Lubethe, Ms. Mpho Phago, Ms. Fulufhelo Neluheni, Ms. Refilwe Ireen Raliphaswa, Ms. Josephine Masemola, and Ms. Ulender Nzimande.

FHI 360: Dr. Natasha Mack, Dr. Joy Noel Baumgartner, Mr. Caleb Parker, Ms. Ansley Lemons, Ms. Michele Lanham, Dr. Theresa Hoke, and Dr. Donna McCarraher.

This study was funded by the U.S. Agency for International Development (USAID). The contents of this report are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the U.S. Government. Financial assistance was provided by USAID under the terms of the Preventive Technologies Agreement (GHO-A-00-09-00016-00).

Executive Summary

FHI 360, in collaboration with in-country investigators, conducted a Phase III clinical trial called FEM-PrEP to assess the effectiveness and safety of oral Truvada for the prevention of HIV through pre-exposure prophylaxis (PrEP). A social marketing intervention planning study — called Sociobehavioral Research and Community Planning to Develop Site-specific Pilot Intervention Plans for PrEP Rollout — was conducted in association with the FEM-PrEP clinical trial in the vicinity of Soshanguve, Pretoria.

One component of the planning study involved an HIV services inventory. The purpose of the inventory was to collect information about the services and the staff at facilities that offered HIV services. The results of this inventory can be used by public health stakeholders to determine which facilities may be ready for the provision of HIV PrEP, once a safe and effective product is identified.

Of 32 facilities that were inventoried, 23 offered some form of HIV testing, and 11 of these were considered comprehensive — meaning they had both HIV testing and a pharmacy onsite. None of the facilities in the survey area had an onsite laboratory, but many outsourced their laboratory needs using the National Health Laboratory Service.

Based on our assessment, 11 of the 32 facilities are currently prepared to offer PrEP services onsite (with HIV testing, pharmacy services, and laboratory outsourcing). Seven other sites — which offer HIV care and treatment (with antiretroviral drugs, or ARVs) and HIV testing — could be ready with additional training and capacity building. In particular, they would need to introduce strong referral mechanisms for laboratory services.

All 7 sites are non-governmental — including non-governmental organizations (NGOs), pharmacies, and private clinics.

It should be noted that 23 of the 32 facilities offered HIV testing — such as voluntary counseling and testing (VCT), provider-initiated testing and counseling (PITC) or mobile testing. The other 9 facilities, which did not offer HIV testing, were non-

governmental. Any facility with HIV-testing services could potentially serve as an entry point for PrEP if it had guidelines for screening potential PrEP candidates. (The screening could be accomplished with a short questionnaire to identify high-risk individuals after they were determined to be HIV negative.) These facilities must also be prepared to refer clients for follow-up at another facility that offers PrEP.

Given the necessary elements for PrEP provision and the distribution of services offered by the inventoried facilities, we suggest that 11 facilities are ready for PrEP provision and an additional seven could be ready with additional training and capacity building. These results are intended to provide public health stakeholders planning for PrEP implementation with a snapshot of where key requisite services for a PrEP intervention are offered in and around Soshanguve, Pretoria, assisting them in decision-making about which facilities may ready for PrEP provision.

Introduction

Introduction

FHI 360, in collaboration with in-country investigators, conducted a Phase III clinical trial called FEM-PrEP to assess the effectiveness and safety of oral Truvada taken daily by women at risk of HIV infection as pre-exposure prophylaxis (PrEP) to prevent HIV acquisition. FEM-PrEP was a multi-centered, double-blind, randomized, parallel, placebo-controlled effectiveness and extended safety trial, jointly funded by USAID and the Bill & Melinda Gates Foundation. Additionally, a social marketing intervention planning study entitled, Sociobehavioral Research and Community Planning to Develop Site-specific Pilot Intervention Plans for PrEP Rollout, was implemented in association with the FEM-PrEP clinical trial, as preparation for the rollout of a PrEP method shown safe and efficacious.

The study aims included the implementation of formative research for the development of a pilot intervention, facilitating a process of community planning for a local pilot intervention, and developing a social marketing plan based on the qualitative research results and community planning process with site-specific recommendations for a pilot intervention. Sites for the rollout planning study were Pretoria, South Africa and Bondo, Kenya.

One component of the pilot intervention planning study involved an HIV services inventory. The purpose of the inventory was to document facility-specific information on services and staffing that could inform public health stakeholders' eventual selection of local facilities in which to roll out a potential HIV-prevention product. The inventory assessed services related to HIV diagnosis, prevention, treatment, and community education, as well as reproductive health. Information about staffing and stock outs was also collected. The inventory was not intended as a quality assessment of the facilities. Instead, the results were intended to provide a snapshot of where key services for a PrEP intervention were offered in Soshanguve, Pretoria. The information could be used by public health stakeholders once the need arises to integrate PrEP.

Unfortunately, funding for the pilot intervention planning study at the Pretoria site was eliminated in August 2010 because of budget cuts from the funder. Therefore, it was not possible to complete the study and create the plan of site-specific recommendations based on study findings. However, the site research team had already completed the HIV services inventory prior to study closure, and results are presented here. We believe that public health stakeholders may find these results useful in their discussions about the readiness of local facilities in Soshanguve to incorporate ARV-based HIV prevention methods into existing health services.

Organization of Results

First, we summarize the services that were offered at the local facilities we inventoried. We asked specifically about services that:

- Might serve as logical entry points into a PrEP program (e.g., HIV testing and counseling [HTC], STI testing and treatment)
- Have potential baseline service or infrastructural components of a PrEP program (e.g., HTC, provision of antiretrovirals drugs, pharmacy, laboratory, adherence support, condom distribution, and community education)
- May provide natural linkages either with HIV-negative clients who access other services —sexually transmitted infection (STI) testing and treatment, voluntary male circumcision, family planning (FP) — or with the HIV-negative partners of seropositive clients accessing the services (e.g., PMTCT, HIV care and treatment, HIV support groups, and nutrition services)

We also summarize the referral practices the facilities reported, and we report on the number and types of staff members the facilities employed at the time of the inventory, particularly focusing on the types of staff members who may fulfill key roles in a PrEP program. We also provide reports of stock outs in the previous six months of male and female condoms, HIV test kits, and ARVs. The stock outs can help to identify potential supply chain issues that may need to be addressed in the context of a PrEP program. Lastly, we summarize the sources and uses of funding in the facilities.

In addition to the aggregate results, we also provide a snapshot of each facility, focusing on key variables that are relevant to PrEP implementation using maps that highlight facility locations and the distribution of key services.

Methods

FHI 360's Protection of Human Subjects Committee (PHSC) did not consider the HIV services inventory to be research because it consisted of collecting data in the public domain. Nonetheless, the activity and instrument were included in a study protocol that the PHSC approved in December 2008. We also obtained local approval of the study protocol by Medunsa Research and Ethics Committee (MREC) in September 2009.

The study research team at FHI 360 developed a structured data collection instrument to systematically document the information about each facility. Site staff members provided feedback on the draft instrument and pre-tested it locally prior to finalization.

The site study team identified organizations, facilities, and programs where the HIV services inventory could be conducted. The identification was based on community engagement activities of the affiliated FEM-PrEP clinical trial and through referrals from local contacts. Among the inventoried facilities were 13 government facilities (10 clinics, 2 community health centers and 1 hospital), plus 7 pharmacies, 10 NGOs, and 2 private clinics.

The inventory of services at these 32 facilities was completed between December 2009 and July 2010. The inventory included all government health facilities in the Soshanguve, Winterveldt, Temba, and Mabopane areas of Pretoria, and one facility in the Ga-Rankuwa area, plus selected non-governmental health facilities. Geographic information system (GIS) coordinates were collected for each facility to construct the maps. Site staff members entered the collected data into an Access database. The database was loaded into ArcGIS v10 (ESRI, Redlands, CA) and the coordinates were displayed. Catchment areas for each comprehensive facility was generated in ArcGIS by creating buffers extending to 5km away from each facility. The boundaries of catchment areas that overlapped were both retracted to the midpoint location between the two facilities. This created catchment area polygons of varying sizes. Population counts from the LandScan 2009 dataset (Oak Ridge National Laboratories, USA) were then aggregated by each catchment area to generate an estimated population density.

Results

Results

Staff

Participants from the 32 health facilities reported on the number and types of staff members who were employed at their respective facility (Table 1). Most facilities reported having directors or managers, doctors, nurses, and counselors. On average, facilities reported having about two nurses, three counselors, and at least one director and doctor. “Other” staff members included cleaners, data clerks, gardeners, care workers, police officers, priests, data capturers, phlebotomists, general assistants, security, messenger, driver, administrator, general workers, coordinators, and clerks.

Table 1. Staff distribution at facilities

Type of staff	# of facilities with at least one person in staff category (N=32)	Median # of staff in category among all facilities (range)
Director / manager	31	1 (0-6)
Doctor	21	1 (0-4)
Nurse / Nurse’s Aide	24	2 (0-32)
Medical Assistants	3	0 (0-13)
Counselors	24	3 (0-7)
Public health educators	8	0 (0-22)
Lab technicians	4	0 (0-2)
Pharmacists	14	0 (0-4)
Receptionists	17	1 (0-5)
Volunteers	14	0 (0-18)
Other	26	3 (0-23)

Outreach Workers

Community outreach workers could play an important role in programs for ARV-based HIV prevention. Potential responsibilities could include community education, recruitment, initial and periodic HIV testing, adherence support, and appointment reminders. Twelve of the 32 participating facilities reported having community outreach workers associated with their facility (range: 1 to 31 per facility). Facilities with outreach workers reported reaching a total of 132 households each week; the median number of households per facility was 20. Three facilities were unsure of how many households they reached per week or month; one facility chose not to respond.

Of the 12 facilities that reported the use of community outreach workers, six reported that their outreach workers provide directly observed therapy (DOT) for antiretroviral therapy (ART). Three facilities reported that their outreach workers were paid, 7 reported having volunteer outreach workers, and 1 reported being unsure of whether their outreach worker was paid or voluntary. One facility had both paid and volunteer outreach workers.

Services Offered

A summary of the main services offered by the participating facilities is listed below (Table 2).

Table 2. Services offered by inventoried facilities and organizations

Type of service	Number of facilities offering this service
Voluntary counseling & testing (VCT)	21
Provider-initiated counseling & testing (PITC)	17
Mobile HIV testing (MBT)	3
STI testing & treatment (STI)	19
HIV care & treatment (ARVs)	18
Family planning (FP)	17
Prevention of mother-to-child transmission (PMTCT)	14
Home-based HIV care (HBC)	10
Directly-observed therapy (DOT) for ART	9
HIV support groups (HSG)	8
Male circumcision (MC)	1
Community education, information, and outreach (CEIO)*	22

*Table 4 gives more detail on topics covered

Table 3 shows a more detailed breakdown of services offered by each individual facility. All but one of the facilities that offered HIV testing (VCT, PITC, and/or or mobile testing) also offered some type of clinical services (usually STI testing and treatment and/or ARV-based HIV care and treatment). Four of the 7 stand-alone pharmacies did not offer any type of HIV testing (note: some clinics and community health centers had onsite pharmacies). Nine facilities offered both FP and ARV-based treatment.

Table 3. Services offered by selected facilities

ID	Facility type	VCT	PITC	MBT	STI	ARV	FP	PMTCT	HBC	DOT	HSG	MC	CEIO
1	NGO					X			X	X			X
6	NGO								X	X			X
7	NGO								X	X	X		
8	NGO	X				X			X	X			X
12	NGO	X	X	X	X	X		X	X		X		X
14	NGO	X	X	X									X
17	NGO								X	X			X
18	NGO	X	X			X			X	X	X		X
19	NGO	X	X		X				X		X		X
2	Pharmacy*		X		X	X	X						
20	Pharmacy	X			X	X		X					
22	Pharmacy		X			X	X						
23	Pharmacy												
26	Pharmacy					X							
27	Pharmacy					X	X						
31	Pharmacy					X							
10	Private clinic	X	X		X	X	X	X					
11	Private clinic	X			X	X	X					X	
13	Private clinic								X				X

ID	Facility type	VCT	PITC	MBT	STI	ARV	FP	PMTCT	HBC	DOT	HSG	MC	CEIO
3	Govt Clinic*	X	X		X	X	X	X		X			X
4	Govt Clinic*	X	X		X	X	X	X					X
15	Govt Clinic*	X			X		X						X
16	Govt Clinic*	X	X		X	X	X	X			X		X
21	Govt Clinic	X	X		X		X	X					X
24	Govt Clinic	X	X		X		X	X					X
25	Govt Clinic*	X			X	X	X	X			X		X
29	Govt Clinic*	X	X		X		X	X					X
30	Govt Clinic*	X	X		X		X						X
32	Govt Clinic*	X	X		X		X	X					X
28	Govt CHC	X	X		X		X	X	X	X	X		X
9	Govt CHC*	X	X	X	X	X	X	X		X	X		X
5	Govt Hospital*	X			X	X		X					X

Govt = Government
CHC = Government community health center
NGO =Non-governmental organization

* Site is considered comprehensive, meaning it offers HIV testing and has an onsite pharmacy

HIV testing and counseling will likely be an entry point into a PrEP program and will also be needed at regular intervals for sustained use of PrEP.

Voluntary Counseling and Testing (VCT)

Of the 32 health facilities that took part in the HIV services inventory, 21 offered VCT. Twelve facilities offered VCT services five days per week (on average); however, this ranged from three to seven days among facilities. On average, 147 clients received services on a typical day, ranging from 10 to 509 clients at any particular facility. Most facilities (n=19) offered services free of charge, however, two required full payment. All facilities that offered VCT (n=21) reported that they followed national policies and guidelines. Staff members at the facilities specified the following training needs:

- General VCT training (n=8)
- ARVs and ART (n=3)
- Adherence training (n=2)
- Unclear about the specific type of training needed (n=2)
- Other: VCT couples counseling, children's counseling, advanced counseling, routine offer, debriefing sessions for nurses and counselors, PMTCT (pediatric and post-natal transmission), and polymerase chain reaction (PCR) method of HIV testing.

Provider-Initiated Testing and Counseling (PITC)

Of the 32 health facilities that took part in the HIV Services Inventory, 17 reported offering PITC. On average, PITC was offered 5 days a week, ranging from half of a day to 7 days per week. On average, 85 clients were served on a typical day when services were offered; however, this ranged from 3 to 499 among the facilities. Most facilities (n=14) offered PITC for free, while two facilities required full payment for services. The majority (n=16) of facilities reported that they followed national policies and guidelines. Staff members identified the following training needs:

- General PITC training (n=2)
- Training for VCT (n=2)
- Other: couples counseling, ARV management, staff debriefing, adherence, and HTC

Mobile HIV Testing (MBT)

Three facilities reported that they offered MBT services for an average of 4 days per week. Facilities reported serving approximately 260 people on a typical day and all facilities offered services free of charge. Two facilities reported that they needed training on primary health care or advanced VCT. All three facilities reported following national policies and guidelines.

STI Testing and Treatment

Testing and treatment of STIs is another client entry point option for PrEP, as well as an option for ongoing PrEP services. Of 32 facilities, 19 reported that they offered STI testing and treatment, an average of 5 days per week (range: 0.5 to 7 days). An average of 63 clients were served per day, with a range of 2 to 212 per facility. The majority (n=14) of facilities offered services free of charge while five facilities required full payment for services. The majority of facilities (n=18) reported that they followed national policies and guidelines. Staff members reported the following training needs:

- General training on STIs (n=4)
- Training on STI management (n=4)
- Other: Adherence, STI counseling, STI testing, an update on new STI protocol

Male Circumcision (MC)

Clients seeking MC services could be informed about PrEP and/or referred for PrEP. Only one of the 32 facilities offered MC. This facility offered circumcision 90 days out of the year (at full cost) to a maximum of 30 clients a day. They also reported that they did not need any training and did not follow national policies or guidelines.

Family Planning (FP)

The provision of PrEP could be integrated into FP services for initial and sustained use. Family planning was offered at 17 of the 32 health facilities included in the HIV Services Inventory. Services were offered by facilities on a weekly and monthly basis. Three facilities offered services for an average of 17 days per month. Of the 14 facilities that offered services on a weekly basis, the services were offered for an average of 6 days per week with a range of 7 to 850 clients served per day. Notably, two facilities offered family planning services to men; one facility served a maximum of 30 men a day, while the other reported typically serving only one man on a typical day. Twelve facilities reported offering services for free, 4 facilities charged full cost, and 1 offered services by cost-sharing. Most facilities (n=15) reported following national policies and guidelines. The following training needs were reported:

- General family planning training (n=4)
- New protocols and updates (n=1)
- Counseling (n=1)
- Drugs (n=1)
- IUDs (n=1)
- Methods and side effects (n=1)

Prevention of Mother-to-Child Transmission (PMTCT)

PrEP could be offered at PMTCT clinics because they have the capacity to dispense ARVs. PMTCT clinics serve a high-risk population and it may be possible to reach uninfected male partners with PrEP services. In addition, HIV testing of pregnant women is integrated into antenatal care services for all women. Seropositive pregnant women are referred to PMTCT services, whereas seronegative women could be offered information about PrEP. Services for the prevention of mother-to-child transmission of HIV were offered at 14 of 32 health facilities an average of 5 days per week. Most facilities (n=11) offered services for free, while two facilities offered services at full cost. Eleven facilities reported that they followed national policies and guidelines. Some reported training needs, including the following:

- General and/or advanced PMTCT training (n=5)
- Exclusive infant feeding (n=1)
- Debriefing sessions (n=1)

HIV Care and Treatment (ARVs)

HIV care and treatment services may be appropriate for the integration of PrEP services, particularly for discordant couples. Services for HIV care and treatment were offered at 18 of 32 facilities for an average of 5 days per week (range: 2 to 7 days). Facilities reported serving anywhere from 7 to 1,500 on a typical day. Nine facilities offered services for free, eight facilities offered services at full cost, and one facility reported cost-sharing the price of services. Most facilities (n=17) reported following national policies and guidelines. Staff members identified the following training needs:

- ART management courses, including side effects (n=6)
- Unclear on their specific training needs (n=3)
- Counseling and debriefing (n=3)
- Care worker training (n=1)
- Administration/auxiliary training (n=1)
- Tuberculosis (TB)/HIV collaboration (n=1)

Home-Based HIV Care (HBC)

Home-based service delivery could be important for PrEP in terms of adherence support and client follow-up. In addition, home-based services offer an opportunity to reach other family members and caretakers with information about PrEP. Services for HBC were offered by 10 of 32 facilities on approximately 4 days per week (ranged from 1 to 5 days). Facilities reported serving a range of 30 to 450 clients on a typical day. Nine facilities reported offering services for free, whereas one facility charged full cost. Nine facilities reported that they follow national policies and guidelines. Staff members reported the following training needs:

- General home-based care (n=5)
- Adherence (n=2)
- Counseling (n=2)
- Peer education (n=1)
- ARVs (n=1)

Directly Observed Therapy (DOT) for ART

Facilities with experience in DOT for ART may be able to share some lessons learned regarding adherence to ARVs. Nine of 32 facilities reported offering directly observed therapy (DOT) for ART. Eight facilities reported offering services for an average of 4 days per week; these facilities reported serving a range of 20 to 440 clients on a typical day. One facility reported offering services 4 days out of the month and was unsure of how many clients they served on a typical day. One facility reported offering services at full cost, whereas eight facilities offered services for free. Eight facilities reported that they followed national policies and guidelines. Staff members reported the following training needs:

- General DOT training (n=4)
- TB (n=3)
- Treatment literacy and medical terminology (n=2)
- Counseling (n=1)
- Adherence (n=1)

HIV Support Groups (HSG)

Support groups have been suggested as possible adherence support for PrEP users. Support groups were offered at 8 of the 32 facilities. Five facilities offered support groups an average of twice per week. Of these, approximately 44 people were served on a typical day (range: 11 to 136). Three facilities offered support groups once per month. Of these, one facility reported serving approximately 60 people on a typical day. All eight facilities offered support groups for free. Six facilities reported following national policies and guidelines. Staff members reported the following training needs:

- Motivation, food parcels, HIV care, capacity building (n=1 for each training need)
- No training needs (n=2)
- Unclear about training needs (n=2)

Other ART Adherence Support

Two facilities reported offering another form of ART adherence support group. One facility offered a free adherence support group once per week, which served approximately 20 clients. This facility reported that they needed additional training for counselors, and that they did not follow national policies and guidelines. Another facility offered a free TB support group on about 20 days out of the month and reported that they have about 38 clients on a typical day. This facility reported that they needed training on TB and that they do follow national policies and guidelines.

Community Education, Information, and Outreach (CEIO)

Community education will be an essential component of a campaign to encourage uptake and community acceptance of PrEP. Services for CEIO were offered by 22 of the 32 facilities. Of these, 15 facilities offered services each week for approximately 5 days (range: 3 to 6 days), 2 facilities offered services for about 13 days per month, and 4 facilities offered services for about 3 days of the year. An average of 224 people received services on a typical day at 9 of the 15 facilities that offered services weekly. A facility that offered services on a monthly basis, reported serving approximately 60 people on a typical day. An average of 200 people received services on a typical day at 2 of the 4 facilities that offered services annually. Nine facilities did not report the number of people they served on a typical day. All facilities offered community education and information services for free. Staff members identified the following training needs:

- General training for community education and information on HIV/AIDS (n=3)
- Condom demonstration, HIV/AIDS counseling, door-to-door outreach, ART, customer care, peer education, and communication skills (n=1, for each training need)

The facilities were asked about the nature and format of the CEIO they provided (see Table 4 below). Based on the facilities' reports, the majority offered community education on HIV prevention, HIV care and treatment, and VCT. Presentations are given mainly for VCT, STI testing and treatment, HIV care and treatment, family planning, and HIV prevention education. Training on the different topics was reported as a method of community education 66 times. Male circumcision was not a major topic for CEIO.

Table 4. Community education topics offered by facilities

Facility offers community education on following topics:	OFFERED (N=32)	Presentations	Trainings	Community Meetings	Workshops	Special Events	Health fairs	CAB Orientations	Theatre	Posters	Videos	Brochures
	N	N	N	N	N	N	N	N	N	N	N	N
Voluntary counseling & testing (VCT)	20	14	9	11	13	14	11	8	3	18	7	18
Provider-initiated counseling & testing (PITC)	13	8	5	8	9	8	8	7	3	13	5	9
STI testing & treatment	16	11	7	7	9	10	7	5	4	16	4	14
Male circumcision	0	0	0	0	0	0	0	0	0	0	0	0
HIV care & treatment	20	14	9	10	10	15	8	8	5	16	16	17
Home-based HIV care	11	8	8	9	8	10	7	7	2	9	2	7
Family planning	12	11	6	6	7	8	4	4	3	10	3	11
Antenatal care/ PMTCT	14	11	7	9	8	11	7	7	4	14	4	11
HIV support groups	11	8	5	7	7	7	7	3	3	4	3	4
HIV prevention education	21	18	10	15	13	18	10	8	4	20	8	18

Referrals

Health facilities were asked to describe their referral networks with other facilities. They identified organizations to whom they referred clients (outbound) and the services for which other organizations referred clients to them (inbound). A common theme was that many facilities referred clients for non-HIV related illnesses or more specialized care for HIV-related illnesses, including TB and tertiary care. The most common service for which they received referrals was ARV-based HIV care and treatment, and to a lesser extent other services such as HTC, DOT, care and support.

Fifteen facilities listed outbound referrals for issues related to HIV —including VCT, ARVs, DOT, low CD4 counts and support groups. Five facilities were named for issues related to TB. Four facilities were listed for palliative, hospice, and home-base care. Four facilities were identified for miscellaneous illnesses, such as meningitis, diarrhea/dehydration, cold/flu, skin diseases. Three facilities were used for disease management, such as tertiary care and referral management.

The facilities also described the nature of the inbound referrals. For issues related to HIV/AIDS, the facilities would have clients referred to them for ARV-based HIV care and treatment and, to a lesser extent, other services such as counseling and testing, DOT, and care and support. Three outside facilities or projects referred clients to the study facilities for TB services. In addition, organizations referred their clients to a study facility for various other reasons: problems paying for medication, palliative/hospice/home-based care, family planning, emergencies and operations/surgery, chronic illnesses, rape survivor services, and primary health care.

Pharmacy

Each of the 32 health facilities interviewed for the HIV Services Inventory was asked about the presence of a pharmacy facility. Fourteen facilities had a pharmacy; one did not have a pharmacy, and 17 did not respond to this question. The facilities with pharmacies reported that the pharmacies were generally open between 5 and 7 days per week. Specifically, 9 pharmacies were open 5 days a week, 3 pharmacies were open 6 days per week, and 2 were open 7 days per week. Facilities reported that generally either a pharmacist (n=8) or nurse (n=7) dispensed medication. However, in some cases a pharmacy technician (n=1), clinical officer (n=1), or pharmacy assistant (n=1) dispensed medications. Three facilities reported that different people dispensed the medications, depending on certain factors —whether the product was an ARV or prophylaxis, whether the patient had other conditions, and whether the product required a prescription.

The facilities reported that the following individuals were in charge of monitoring the stock (e.g., inventory, reordering, etc.):

- Pharmacist (n=8)
- Nurse (n=4)
- Other: project manager, pharmacy assistant, facility manager, pharmacy technician or clinical officer (n=5)

In case of a stock out, seven facilities reported contacting the district pharmacist; however, one facility reported that they contact a medical supplier.

Condom Distribution

Twenty-eight facilities reported distributing male condoms to clients. About 116,560 male condoms were distributed to clients from 27 facilities; one facility did not report the number of male condoms they distributed. Facilities reported distributing as few as 20 and as many as 24,000 male condoms. When asked about stock outs of male condoms in the previous 6 months, 19 organizations reported having no stock outs. On average, there was less than 1 stock out in the previous 6 months, ranging from 0 to a maximum of 5. Male condoms were mainly supplied by the government (n=22), but 7 facilities received male condoms from private organizations, such as the City Medical Health Suppliers, EDNA Medical Distributers, UPD Wholesalers, African Cash and Carry, and other wholesalers.

Twenty-two facilities reported that they distributed female condoms to clients. Four facilities that normally distributed female condoms, did not distribute any during the past month. Three facilities were unsure of how many they distributed. Some facilities did not report on the total number of female condoms they distributed. The total number of female condoms reportedly distributed across the remaining 15 facilities was 12,967, with 10,000 female condoms being distributed by a single facility. When asked how many stock outs took place in the previous 6 months, 12 facilities reported having no stock outs. However, on average there were about 3 stock outs of female condoms. When asked how much clients pay for one female condom, one facility reported female condoms costing 35 Rand. However, most facilities (n=20) reported that the condoms were free. One facility did not know how much the clients were charged for each female condom. Twenty facilities reported that the government was the main supplier of female condoms; 1 facility reported getting female condom supplies from a wholesaler.

Voluntary Counseling and Testing/Provider Initiated HIV Testing and Counseling (VCT/PITC)

Health facilities were asked to report where they acquired HIV test kits. The government was reported to supply 14 facilities with tests. One facility acquired tests from a private agency, the Society for Family Health, whereas another facility acquired the tests from pharmaceutical companies. In the past 6 months, no facilities reported being unable to offer HIV tests or tie-breaker HIV tests due to kits being unavailable or stock outs. One facility did not know whether this took place. When asked whether clients pay for HIV tests, 15 facilities reported that their clients do not pay, but 1 facility said their clients do pay approximately 91 Rand for an HIV test.

Antiretroviral Drugs

No facility reported having stock outs of ARVs. The main supplier of ARVs was the government (n=6); the only other supplier was an unspecified private organization. Clients of the 6 facilities who received ARVs from the government pay nothing for ARVs; however, the 1 facility that received ARVs from a private organization charges clients 600 Rand for either Truvada, Statine, PG, or Stavir.

Counseling and Support Groups

Twenty-one facilities reported having counseling rooms and 19 facilities reported having a group meeting area. On average, 30 people could be accommodated for a large group session (range: 8 to 100). Eighteen were not able to offer support groups, while 12 could. The facilities offered the following types of support groups:

- Living with HIV (n=11)
- Emotional and psychosocial support (n=7)
- Protecting self from HIV infection (n=6)
- Protecting self from STIs (n=5)
- Protecting negative partners from HIV infection (n=5)
- Five facilities offered other types of groups, including: adherence to treatment, religious-cultural counseling, TB, preventing mother-to-child transmission (PMTCT), and chronic care

Six facilities reported that the support groups meet monthly, 4 reported groups meeting once per week, and 1 facility reported that the groups met more than once per week. On average, among all facilities, about 2 support groups would meet each week.

Funding

Facilities were asked to report on their funding sources, the approximate percentage that each source covers of the annual budget, and whether that funding covers staff salaries, medications, individual projects, other commodities, administration, volunteer incentives, staff training, transport, and client subsidies.

Government Funding

Of the 32 health facilities, 19 reported receiving funds from the government, which, on average, accounted for about 86% of their total funding. Government funding accounted for 100% of the annual budgets for 12 of the facilities. The other 13 facilities did not received government funding. Government funds were used for the following items:

- Staff salaries (n=19)
- Medication (n=14)
- Individual projects (n=10)
- Other commodities (n=10)
- Administration (n=19)
- Volunteer incentives (n=6)
- Staff training (n=12)
- Transport (n=15)
- Client subsidies (n=5)

PEPFAR

Of the 32 health facilities, 5 reported receiving funding from the President's Emergency Plan for AIDS Relief (PEPFAR). One facility was unsure of how much funding it received from PEPFAR. Two facilities reported that 100% of their annual budget consisted of PEPFAR funding, whereas the others reported that PEPFAR accounted for 10% and 30% of their budgets, respectively. All facilities reported the following uses for these funds:

- Staff salaries (n=5)
- Administration (n=4)
- Other commodities (n=3)
- Staff training (n=3)
- Transport (n=3)
- Volunteer incentives (n=2)
- Medication (n=1)
- Individual projects (n=1)

No facilities reported using PEPFAR funding for client subsidies.

Client Payments

Eight of the 32 health facilities reported receiving funds from client payments. One facility was unsure of how much client payments contributed to the overall annual budget. Of the other 7 facilities, 5 reported that 100% of their annual budgets were comprised of client payments and the other two facilities reported it as 10%

of their budget. Seven facilities reported using client payments to cover staff salaries, while six facilities reported using it to cover medications, other commodities, administration, and transport. Four facilities reported using client payments for staff training, 3 used it for individual payments, 1 used the funds for client subsidies, and 0 facilities reported using client payments to cover volunteer incentives.

International Organizations

Two of the 32 health facilities reported receiving funding from other international organizations. One facility reported that 100% of their annual budget came from this funding, whereas the other facility was unsure of the proportion of their annual budget that came from another international organization. Both facilities reported using this funding for transport, but neither used the funding for client subsidies. One facility used this funding for staff salaries, medication, individual projects, other commodities, administration, volunteer incentives, and staff training.

Other Financial Sources

One facility reported receiving funds from a local Anglican Church which comprised 90% of their annual budget. This funding was reported to be used for staff salaries, individual projects, other commodities, administration, staff training, and transport. Another facility reported receiving funding from a mutual/health insurance provider, which comprised about 10% of the facility's annual budget. This funding was used for medication, other commodities, administration, volunteer incentives, staff training, and transport.

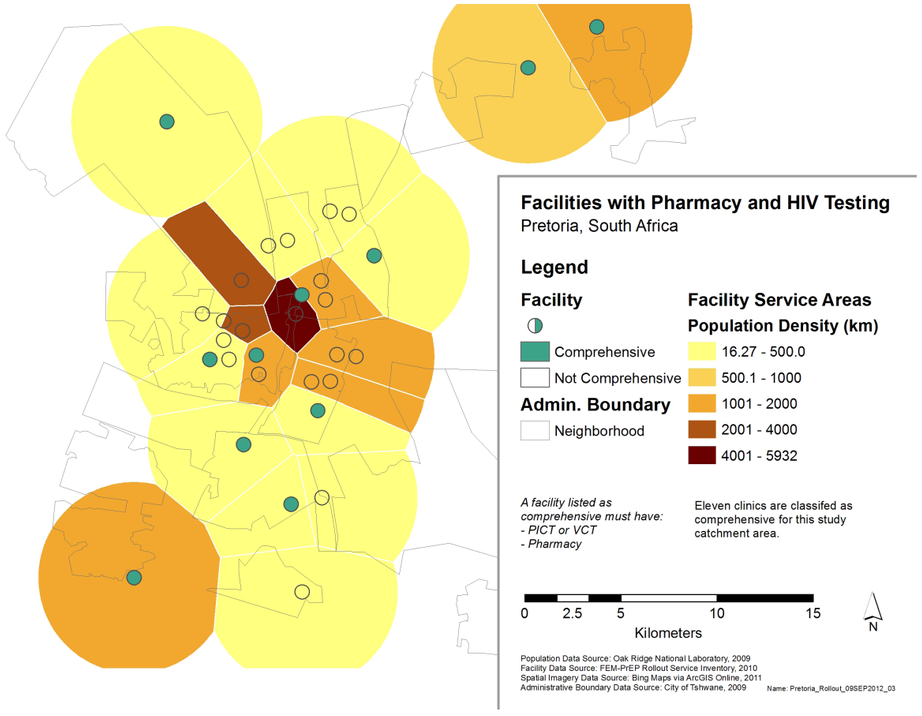
Three facilities received funding from other organizations, including the National Lottery and the Foundation for Professional Development (FPD). Of the two facilities that reported receiving funding from the National Lottery, 60% and 40%, respectively, of their annual budgets were comprised of this funding. Both facilities used their funding from the National Lottery for staff salaries, other commodities, staff training, transport, and client subsidies. Only one facility used this funding for medication and individual projects. One facility received funding from the Foundation for Professional Development (FPD), which comprised 50% of their annual budget and was used for individual projects, other commodities, and volunteer incentives.

Maps

It seems likely that a PrEP distribution site would need to include three essential components: HIV testing and counseling (HTC), a laboratory, and a pharmacy. However, none of the facilities in our survey had an onsite laboratory —all laboratory services for government facilities (if available) were outsourced using the National Health Laboratory Service (NHLS); the private clinics would have to use private labs.

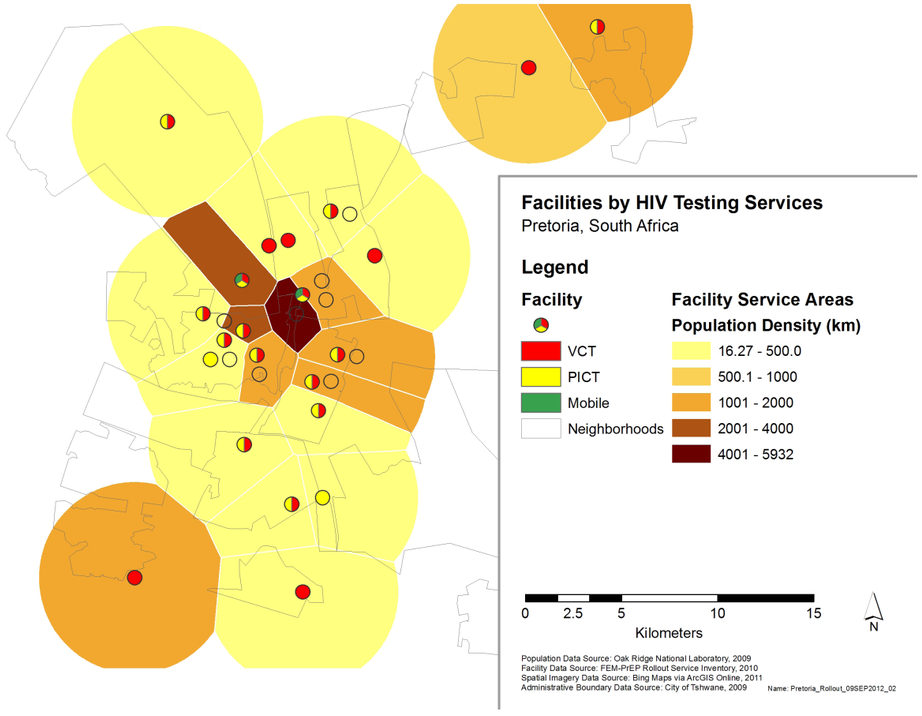
Therefore, we considered that 11 of the 32 facilities that had 2 of the essential components-- HIV testing and pharmacy services--were "comprehensive" sites (Figure 1). Ten of these 11 sites were government facilities (indicated by asterisks in Table 3) and should be able to outsource for laboratory services. The remaining site was a pharmacy that offered STI and ARV services and was, therefore, likely to have access to a laboratory.

Figure 1. Map of comprehensive facilities



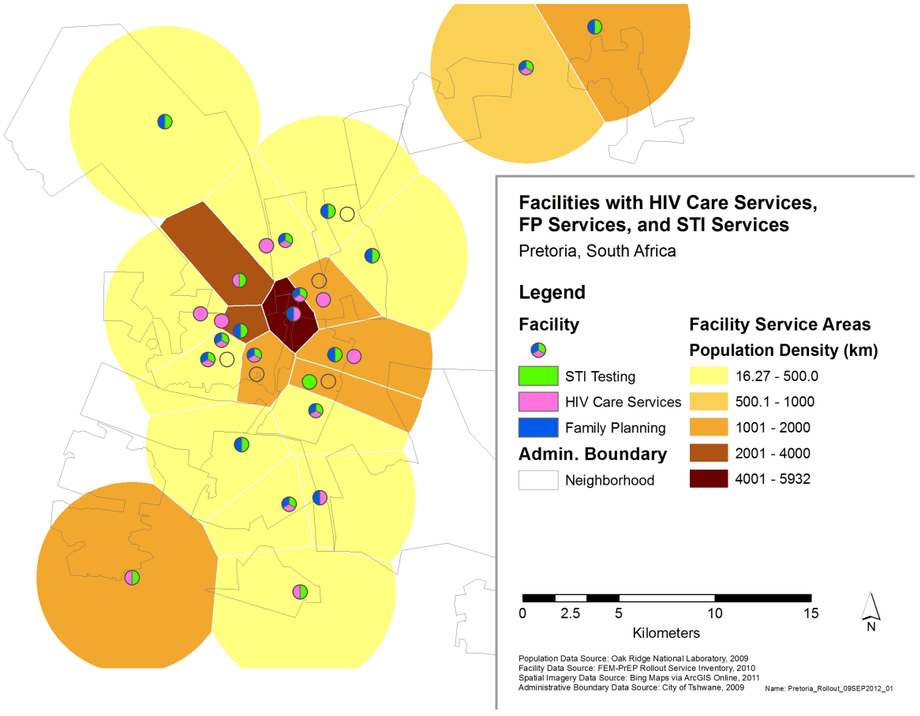
Eleven of the 23 facilities offered HTC **and FP** services, and are presented here in green. Other facilities are shown with blank circles that were not listed as comprehensive. Among the 23 facilities that offered HTC services, it should be noted that HTC could be provided as part of VCT, PITC, or mobile VCT. Figure 2 illustrates the distribution of HTC services across the 32 facilities. The catchment areas shown here are divided by white lines, and are distinctly for comprehensive facilities.

Figure 2. Facilities by HIV testing and counseling services offered



An important part of preparing for PrEP distribution is to identify potential service entry points. For example, facilities that offer FP or STI testing and treatment would be feasible points of service entry. HIV care and treatment clinics could also be an appropriate entry point for HIV-negative partners in discordant couples. In addition to serving as potential entry points for taking PrEP, the FP, STI and HIV services are potentially good PrEP distribution sites because they would already have some clinical staff and the services they offer are important secondary services for clients who take PrEP. Figure 3 illustrates the distribution of these three services across the 32 sites in the inventory.

Figure 3. Availability of FP, STI, and HIV services at the facilities



Discussion

When program planners consider where and how to roll out ARV-based HIV prevention, the integration of new methods into existing service delivery channels is one likely option. Our inventory of health facilities and organizations around Pretoria revealed varying levels of readiness to incorporate ARV-based, HIV-prevention services. Comprehensive global guidelines do not exist for the provision of PrEP outside of demonstration projects (WHO, 2012; CDC, 2012). However, at a minimum, facilities would need to offer (1) HTC; (2) laboratory services, (on-site or off-site); and (3) a pharmacy for the distribution of PrEP to clients. The following service-provision elements are important, but not necessarily required: HIV prevention and adherence counseling and support, STI testing and treatment, FP, HIV care and treatment, and HIV prevention education on a variety of topics including MC.

Currently in South Africa the model for ARV-based HIV care and treatment is a "one-stop-shop" model, where clients receive all the necessary services at one facility. Client services would include HTC, the provision of medications including ARVs and other drugs (such as cotrimoxazole) for opportunistic infections, and laboratory tests. The required lab tests include TB screening, CD4 (every 6 months), viral load (once a year if already on ART), and tests for anemia. For government facilities that do not have onsite laboratories, the client can still provide samples in that facility, which is responsible for sending and receiving laboratory test results using the National Health Laboratory Service (NHLS). Private clinics, pharmacies, and NGOs would need to use a private laboratory.

Drawing parallels to the ARV-based, HIV care-and-treatment model, we expect that the easiest service-provision model for PrEP would be the "one-stop-shop" model, where the clients would receive all the basic services within one clinic, and often by

one provider. For example, one nurse or medical officer could be responsible for HIV testing and PrEP distribution. For any necessary lab tests, facilities could either have an onsite laboratory or a similar system of outsourcing lab services to a higher level facility. Facilities that already provide ARV-based HIV care and treatment would have those outsourcing mechanisms in place for lab tests but other facilities would probably not have those in place. For example, facilities that provide FP and STI services may need to establish or strengthen a referral system for lab tests given that FP and STI services can often be provided without an onsite lab (especially if the syndromic management of STIs is used).

Another model links services across clinics within a larger facility, such as a hospital (using intra-facility referrals) or across facilities (using inter-facility referrals) to obtain all of the necessary services. Potential PrEP clients could obtain their HIV-test results at a variety of entry points (NGOs, pharmacies, and lower echelons of care). In this model, there would need to be a strong referral system in place for clients to receive follow-up care for PrEP.

Based on our assessment of the readiness of 32 facilities inventoried to integrate PrEP, 11 of the 32 facilities in our inventory are currently prepared to offer PrEP services onsite (HIV testing, pharmacy services, and laboratory outsourcing available). Seven other sites — which offer HIV testing and ARV-based HIV care and treatment (a proxy indicator of having pharmacy services) — could be ready if capacity was built for strong referral mechanisms for laboratory services, as these 7 sites are all non-governmental (NGOs, pharmacies, and private clinics). If building capacity at these 7 facilities is not feasible, it should be noted that about two-thirds of the facilities offered HIV testing (VCT, PITC, or mobile testing; n=23). Of those that did not HIV testing, all were non-governmental. Any facility with HIV-testing services could potentially serve as an entry point for the provision of PrEP if the facilities had guidelines for screening potential PrEP candidates. (The screening might include a short questionnaire to assess high-risk, HIV-negative individuals.) The facilities must also be adequately prepared to refer clients for follow-up at another facility that offers PrEP.

The FEM-PrEP clinical trial was stopped early for futility, and the final results showed that Truvada did not significantly reduce the rate of HIV infection (Van Damme et al., 2012). However, Truvada was approved by the United States Food and Drug Administration in July 2012 as PrEP for HIV prevention (U.S. Food and Drug Administration, 2012) based on the results of two other clinical trials (Grant et al., 2010; Baeten et al., 2012). If policymakers in South Africa decide to approve Truvada for PrEP use, they will need to make decisions about where and how to implement PrEP. This case-study inventory in the Pretoria area may be of interest to policy makers as an indication of the potential readiness of these facilities to accommodate PrEP integration. It should also be noted that the facilities in this inventory need further training for the services that they currently offer, not simply for any new services.

The provision of PrEP could offer women, in particular, a female-controlled method of HIV prevention in addition to the female condom which, although available, is still not widely used. This inventory suggests that, with the proper support, it could be possible to offer PrEP services at decentralized locations and in a variety of settings.

References

References

Baeten JM, Donnell, D, Ndase NR, Mugo JD et al. (2012). Antiretroviral Prophylaxis for HIV Prevention in Heterosexual Men and Women. New England Journal of Medicine, 2012; 367(5):399-410.

CDC. (2012). PrEP: A new tool for HIV prevention (CDC Fact Sheet).
Available at: http://www.cdc.gov/hiv/prep/pdf/PrEPfactsheet.pdf

Grant, RM, Lama, JR, Anderson, PL, McMahan V et al. (2010). Preexposure Chemoprophylaxis for HIV Prevention in Men Who Have Sex with Men. New England Journal of Medicine, 2010; 363(27):2587-2599.

U.S. Food and Drug Administration (2012). "FDA approves first drug for reducing the risk of sexually acquired HIV infection". http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm312210.htm. Last accessed: 3 October 2012.

Van Damme L. Corneli A, Ahmed K, et al. (2012). Pre-exposure prophylaxis for HIV prevention among African women. New England Journal of Medicine, 2012; 367:411-22.

World Health Organization (2012). Guidance on pre-exposure oral prophylaxis (PrEP) for serodiscordant couples, men and transgender women who have sex with men at high risk of HIV: Recommendations for use in the context of demonstration projects. WHO: Geneva.

[Inside Back Cover]

FHI 360 HEADQUARTERS
2224 E NC Highway 54
Durham, NC 27713 USA
T 1.919.544.7040
F 1.919.544.7261

SOUTH AFRICA OFFICE
2nd Floor, 339 Hilda Street
Hatfield 0083
Pretoria, South Africa
T 27.12.423.8000
F 27.12.342.0046

www.fhi360.org