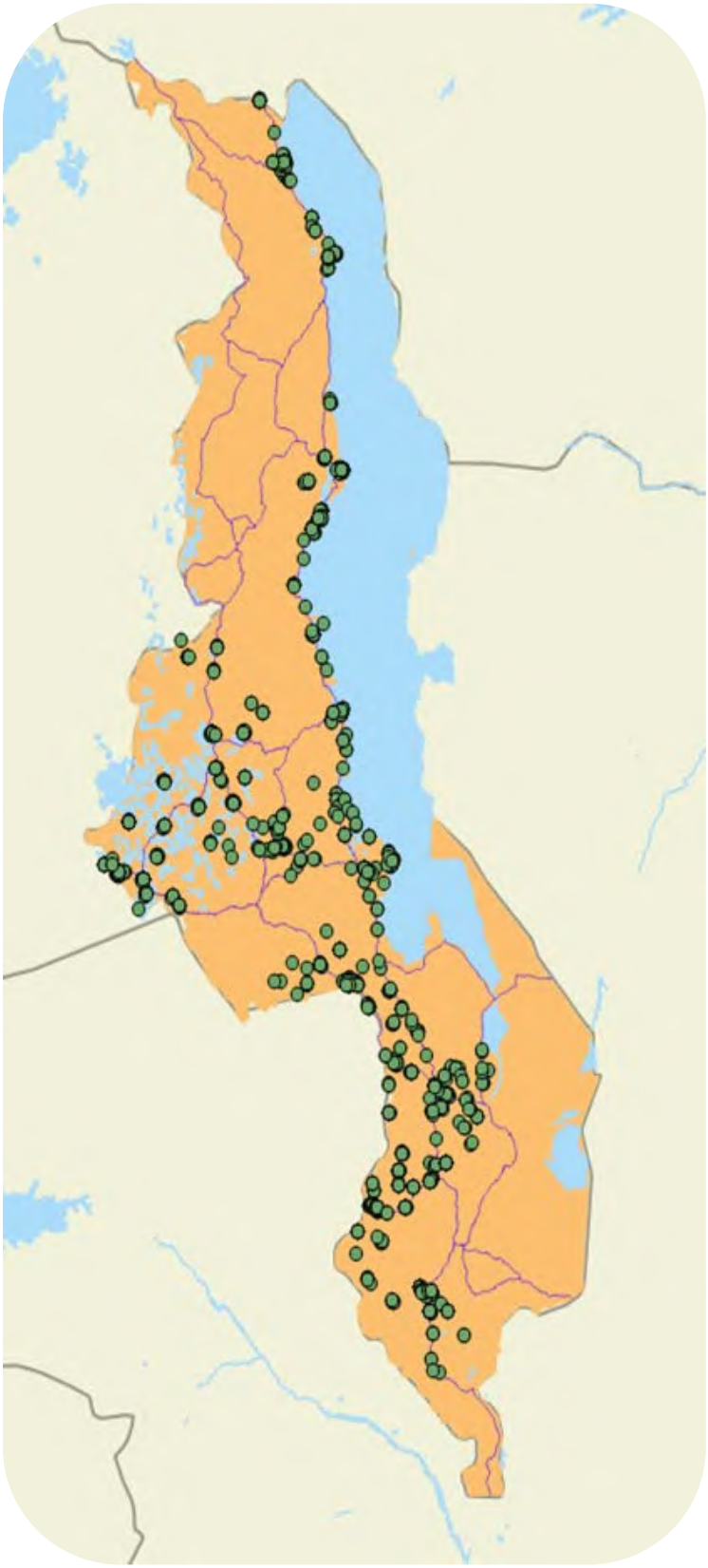

PLACE REPORT

Malawi

September 2018

USAID FROM THE AMERICAN PEOPLE

PEPFAR

LINKAGES Across the Continuum of HIV Services for Key Populations

UNC PROJECT Lilongwe, Malawi

CEDEP Centre for the Development of People

The Global Fund To Fight AIDS, Tuberculosis and Malaria

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1. EXECUTIVE SUMMARY

1.1 Background and Objectives

The PLACE method addresses the challenge of how to identify and tailor prevention programs to local epidemics. Not only are many people asymptomatic, which contributes to a hidden epidemic, but persons occupying central positions in HIV transmission networks are often members of mobile, stigmatized, and hard-to-reach populations. Because many people do not know their HIV status and because many of those who are infected are hidden, there is a need for methods based on sound epidemiologic science that use technology appropriate to the local setting to uncover local transmission networks in a way that leads to effective, ethical, and evidence-based prevention.

In Malawi, the objectives of the PLACE study were the following:

1. To conduct programmatic mapping in selected districts to identify venues where key populations can be reached
2. To estimate the size of key populations in each district who can be reached at venues
3. To characterize HIV service coverage indicators for HIV programs reaching key populations
4. In a subset of districts, to survey and test members of key population groups

1.2 Funding and Districts

Funding for the initial six districts (PLACE I) was provided by PEPFAR through a USAID funded project called Linkages. Funding for the subsequent 15 districts (PLACE II) was provided by the Malawi Ministry of Health from the Global Fund.

In 2016, PLACE I was implemented in five districts and one city:

1. Blantyre
2. Lilongwe
3. Machinga
4. Mangochi
5. Mzuzu (but not the rest of Mzimba district)

In 2017, PLACE II was implemented in an additional 15 districts:

6. Balaka
7. Chikwawa
8. Dedza
9. Dowa
10. Kasungu

11. Mchinji
12. Mwanza
13. Neno
14. Nkhata Bay
15. Nkhotakota
16. Ntcheu,
17. Salima
18. Karonga
19. Rumphi and
20. Mzimba (excluding Mzuzu)

1.3 Methods

The PLACE method has five steps:

1. Preparation including stakeholder engagement and ethical review
2. Venue Identification
3. Venue Visiting and Mapping
4. Bio-behavioral Survey of People at Venues at a Busy Time
5. Data Use

Each step is summarized in the table below.

Table 1.1 Steps in the PLACE Protocol: Overview

Step	PLACE Objective	Methods
1	Preparation. To consult with stakeholders, prepare the PLACE strategy and protocol, and identify areas	▪ Synthesis of epidemiology of HIV in Malawi ▪ Consultation with Linkages, NAC, implementing partners, stakeholders ▪ Mapping Readiness Assessment ▪ Ethical Review / IRB ▪ Piloting of Survey Instruments and Preparation of Data EntryTablets ▪ Training Interviewers and Supervisors ▪ Identification of Key Populations to Participate as Team Members
2	Venue Identification To identify public locations where people meet new sex partners or where people who inject drugs can be reached	▪ In PLACE I, fieldwork teams interviewed community informants throughout the district to identify venues where people meet new sexual partners ▪ In PLACE II, the team first consulted district structures to identify Priority Prevention Areas (PPAs) in each district. The team focused community informant interviews within these PPAs. PLACE II provided a more active role for district structures and helped organize fieldwork by sub-areas within the district

Step	PLACE Objective	Methods
3	Venue Visits and Mapping To visit, map, and characterize these locations in each selected area	▪ In PLACE I, the plan was to visit all venues identified by community informants. More venues were named than expected, however, so a sample of venues was visited ▪ During the visit, efforts were made to interview a knowledgeable person (such as a bar manager) about the venue and its patrons as well as 1-3 female sex workers and MSM who at the venue at the time of the visit ▪ In PLACE II, the team designed a sampling strategy from the outset to align the number of venues to visit with the funding and time available ▪ Venues were sorted by priority and a sample of 90 high priority venues and fewer lower priority venues were randomly selected for onsite interviews. Those not selected were still visited for the purpose of mapping and determination of whether the venue was operational or not ▪ Instead of interviewing 1-3 FSW / MSM at the time of the venue visit, 1-3 female staff / women who lived at the venue were interviewed. This change was made to decrease the stigma associated with identifying an MSM or FSW at the venue and because most of the female workers and women who lived at the venue were FSW anyway
4	Bio-Behavioral Survey To describe people at venues including HIV prevalence, HIV prevention and treatment cascades, access to services.	▪ In PLACE I, a survey of people at venues at a busy time was implemented in Zomba. Men and women were interviewed and tested for HIV. All those with a positive test were asked to provide a dried blood spot sample that was analyzed for viral load ▪ In PLACE II, approximately 100 people were sampled from venues at a busy time and interviewed about their behavior and access to services. In most districts, those surveyed were given the opportunity to be tested for HIV
5	Data Use To use findings to inform interventions	▪ In PLACE I, the data were provided to Linkages as the data were collected. ▪ In PLACE II, data use workshops were planned but were not fully realized. Weir met with district representatives and provided a copy of district data to the stakeholders

1.4 Results

1.4.1 Over 3500 Community Informants Identified Venues

During PLACE I, 2,227 community informant interviews were conducted. Under PLACE II, 1500 community informants were interviewed. The largest number of informants were interviewed in the districts with the largest population—Blantyre (700 informants) and Lilongwe (940 informants). The target number of community informants was met or exceeded in every district except Mangochi (achieved 90% of the target). Community informant interviews were usually conducted over a three-day period, except in Lilongwe and Blantyre.

1.4.2 Bars were the most common type of venue reported

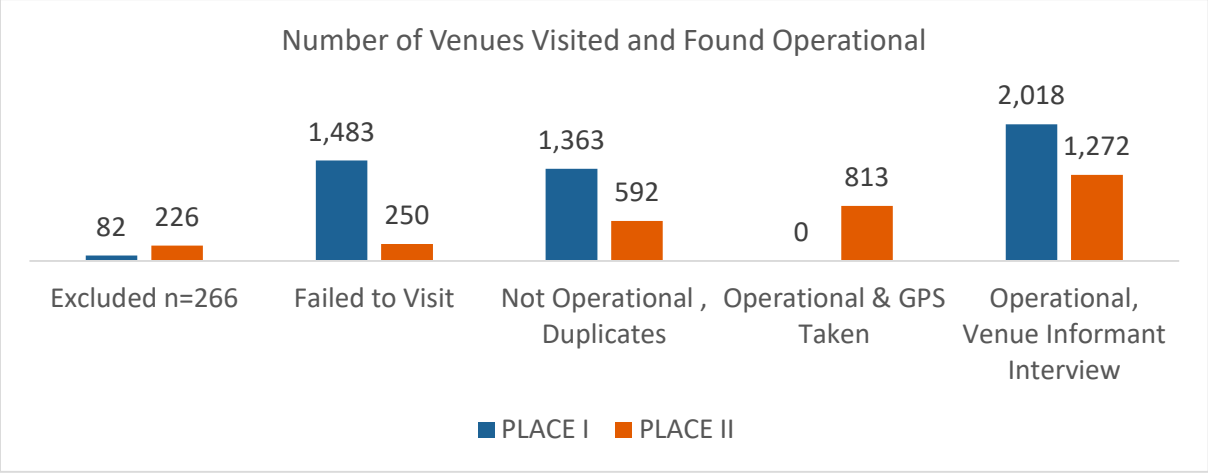
The 3500 informants provided over 20,000 reports of venues. Bars were the most common type of venue reported. Under PLACE I, almost all venues were reported to have female sex work. Under PLACE II, 89% of venues reportedly had sex work onsite.

1.4.3 Over 4000 Venues were Visited and Found to be Operational

Of all the venues that the field work team attempted to visit, over 4000 were found to be operational. Others were not found or turned out to be duplicate venues. Under PLACE I, 2018 venues were found to be operational. Under PLACE II, 2085 venues (1272 with GPS and onsite interview; 813 with GPS only) were found to be operational.

Data from the venue visits were used to estimate the number of operational venues in each district; 2980 operational venues are estimated in PLACE I districts and 2,279 in PLACE II districts, for an estimated total of 5259 operational venues.

Figure 1 Outcome of Venue Visits: PLACE I and PLACE II



1.4.4 Venue Type Differed by District

Overall, the most common type of venue was a bar with sex on site, but this varied by district. In Balaka, the most common type of venue was a shebeen. All districts identified rest houses, shebeens, bars without sex on site and bars with sex on site. Other venues were massage parlours, street sites, and brothels.

1.4.5 Key Populations Visit Venues

The table below shows the estimated number of venues with each key population, by region, for districts covered in PLACE I or PLACE II.

Table 1.2 Number of Venues with Key Populations by Region, Estimated

	Central	Northern	Southern	All
Transgender People (#)	51	3	40	94
Men Who Inject Drugs (#)	51	4	42	97
Men Who Have Sex with Men (#)	357	116	244	717
Men Who Buy Sex (#)	1,266	467	1,307	3,040
Female Sex Workers (#)	1,729	646	1,827	4,202

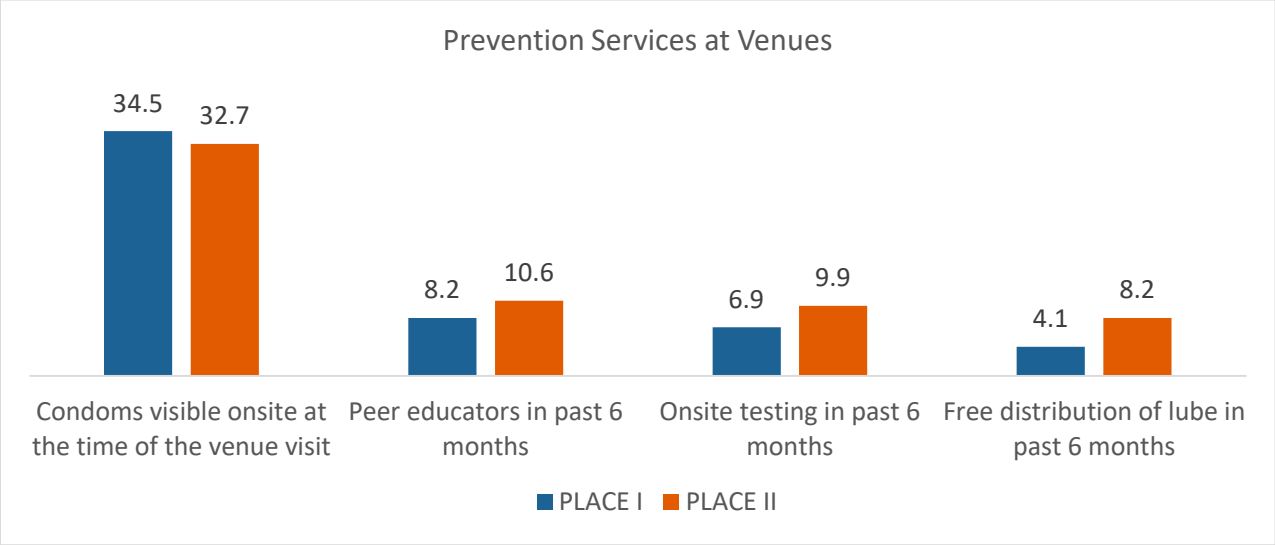
1.4.6 Female Sex Workers Live Onsite at Some Venues

The proportion of venues where the General Venue Informant reported that female sex workers lived onsite varied by district, ranging from 9.5% in Balaka to 36% in Mchinji and Nkhotakota. Central Region had the highest proportion of venues (29%) reporting sex workers live onsite.

1.4.7 Availability of Prevention Services at Venues

Prevention service availability was similar for PLACE I districts in 2016 and PLACE II districts in 2017. Condoms were visible at about a third of the venues. About 10% had peer education at the venues, according to the venue informant. The venue informant may not have known of the peer outreach to the venue. The availability of prevention services at PLACE I venues may have improved during 2017. About a third of the venues had condoms visible at the time of the venue visit, but the percentage varied by district, with the highest in Mzuzu and the lowest in Balaka.

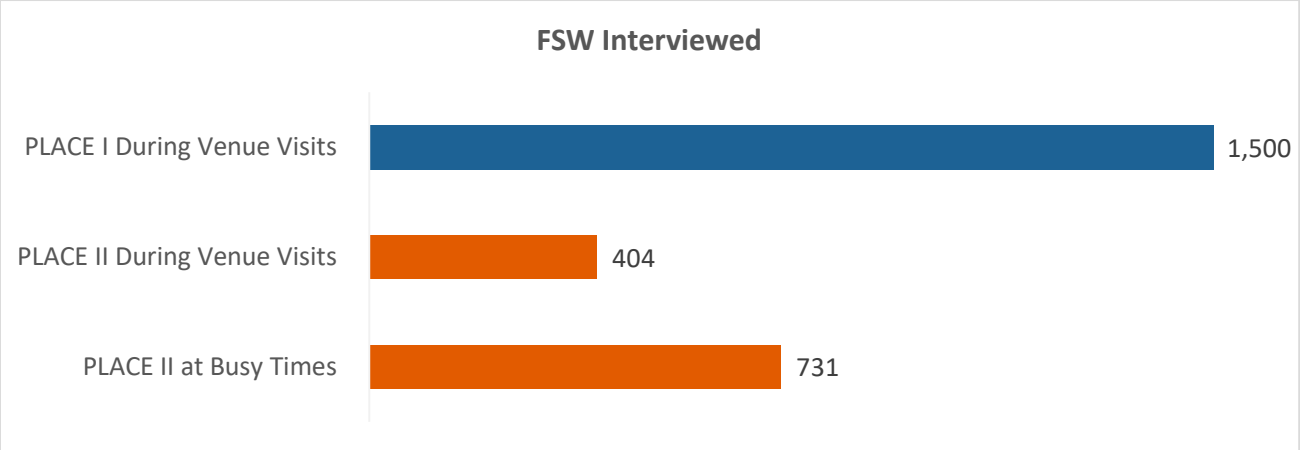
Figure 2 Comparison of PLACE I and PLACE II Districts: Availability of Prevention Services



1.4.8 2,635 FSW Interviewed

During PLACE I, 1500 FSW were interviewed at the time of the venue visit to venues in six districts. During PLACE II, 404 FSW were interviewed at the time of the venue visit and 731 were interviewed at venues during a busy time. In total, 2,635 FSW were interviewed.

Figure 3 Number of FSW Interviewed



1.4.9 Many FSW use cell phones but do not meet partners online

In PLACE II, the team asked about frequency of cell phone and social media use. The questions were: “How frequently do you use a cell phone?” and “How frequently do you use social medial online such as Facebook or other social network site?” Cell phone use was common, but over 80% of FSW reported that they never or almost never used online social media. Only 12% of FSW (144) reported meeting a new sexual partner online or on a phone app in the past 3 months. Of these, there is non-missing data for 92 FSW who reported the number of partners met online in the past 12 months. Among these 92 FSW, the average number of partners met online over the past 12 months was 7, with over half of the women reporting two or fewer.

1.4.10 Receptive anal sex among women

Over 10% of FSW reported anal sex in the past 3 months with a man. Other women interviewed at the venues at a busy time also reported anal sex, but less frequently than the FSW.

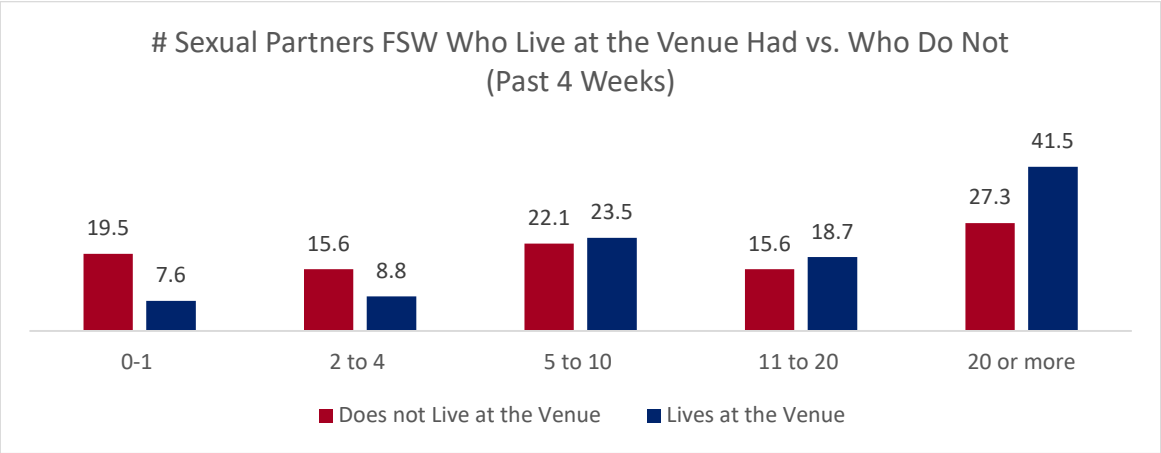
1.4.11. Injecting drug use

8% of FSW interviewed during PLACE I reported injecting drug use. Less than 1% of FSW under PLACE II reported injecting drug use.

1.4. 12. FSW who lived at the venue had more sexual partners

FSW who lived at the venue had more sexual partners than FSW who did not live at the venue.

Figure 4 Number of Partners Among FSW Who Live at the Venue



1.4.13 Among FSW: Self-Reported HIV Infection and ART

The team asked FSW whether they had been tested for HIV and if so, whether they had had a positive test, were ever on treatment, were on treatment now and whether they had taken ART in the past seven days without missing 3 or more doses. Most of the FSW had been tested, but many on treatment reported missing 3 or more doses in the past 7 days. These are self-reported data and do not include those infected who do not know their status.

Figure 5 HIV Infection and ART Among FSW

	PLACE I	PLACE II
Interviewed (#)	1,470	1,135
Ever Tested (#)	1,415	1,058
Reported Positive HIV Test (#)	579	369
Ever on ART (#)	475	341
Now on ART (#)	426	331
ART Compliant (#)	301	202

1.4.14 Access to services

Many FSW (35% in PLACE I districts and 65% in PLACE II Districts) reported contact with an outreach worker and over 60% reported receiving free condoms. Fewer reported visiting a drop-in center.

1.4.15 638 MSM Interviewed

During PLACE I, 293 MSM were interviewed. During PLACE II, 345 MSM were interviewed. In total, 638 MSM were interviewed.

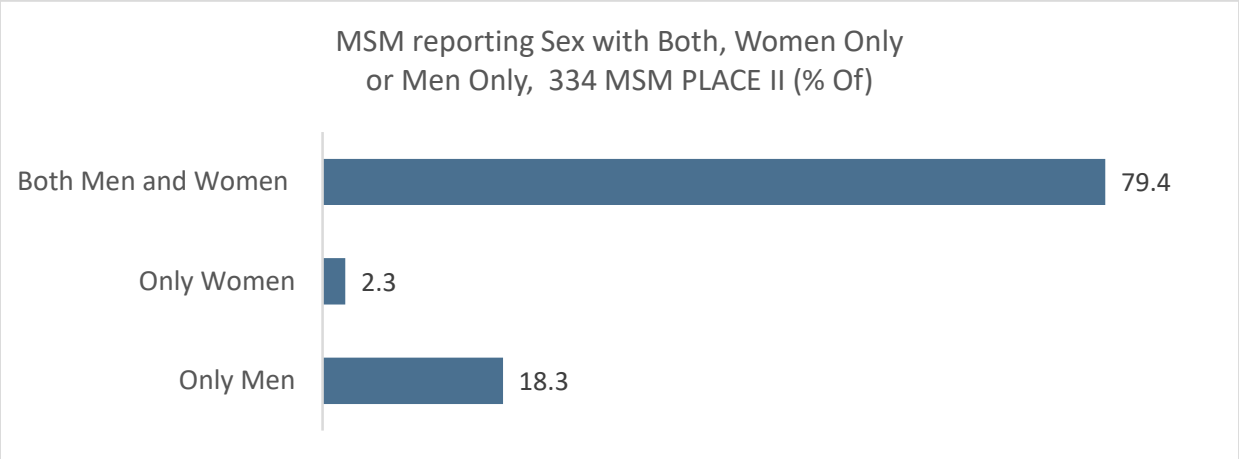
1.4.16 Frequency of Cell Phone and Social Media Use by MSM

Under PLACE II, the team was especially interested in knowing whether MSM use social media to meet new sexual partners. Cell phone use was common among the 345 MSM interviewed. About a third of MSM reported using social media daily. Over half reported never using social media. Fifty-eight of the 345 MSM (17%) reported meeting a new sexual partner online or on a phone app, with the mean number being 2 partners over the past 12 months. Only 15 of the 345 (4.3%) reported meeting 3 or more partners online in the past 12 months. The question did not ask whether the person met online was male or female. It is possible that some of the partners met online were females.

1.4.17 Many MSM Report Sex with Women

During PLACE II, the team asked MSM about their behaviors. About 80% of MSM reported sex with both men and women. 18% reported only having sex with men and 2% reported no male or female partners in the past 12 months. These 2% of men self-identify as gay men and are included as MSM.

Figure 6 PLACE II: Percentage of MSM reporting sex with Women



1.4.18 MSM: Self-Reported HIV Infection and ART

Among MSM, almost all had been tested at least once. Of those who reported having received a positive test, however, only 9 of 15 in PLACE I districts and 11 of 31 in PLACE II districts reported having ever been on ART.

Figure 7 Self-Reported HIV Infection among MSM

	PLACE I	PLACE II
Interviewed (#)	281	345
Ever Tested (#)	274	324
Reported Positive HIV Test (#)	15	31
Ever on ART (#)	9	11
Now on ART (#)	9	9
ART Compliant (#)	8	7

Figure 8 Access to Services Among MSM (%)

	PLACE I	PLACE II
Bought Condoms – Past 6 Mo (%)	55.3%	66.1%
Received Free Condoms (%)	77.0%	81.2%
Visiting Drop In Center (%)	39.0%	32.0%
Contact w. Outreach Worker (%)	41.7%	67.8%

1.4.19 Results from Interviews with Transgender Population

Thirty-eight transgender women were interviewed as part of the PLACE study (all of these were in PLACE II). Twenty-six were age 18-24; 6 were 25-39 and 6 were 40 or older. Seven of the 38 reported living at the venue. 15 reported having one sexual partner in the past four weeks. 16 reported 2-4 partners and 7 reported five or more. All reported having had sex with men. None reported having sex with a woman. One had injected a non-prescription drug in the past 12 months.

Over 80% reported purchasing condoms in the past 6 months and 10 reported visiting a drop-in center for female sex workers. Twenty-nine had accessed condoms for free and 21 had received information from an outreach worker. Only 15 of the 38 were tested for HIV as part of PLACE. Fourteen were HIV negative. The other person did not disclose their test result. Two reported having been previously told they were infected with HIV and both reported being currently on treatment.

1.4.20 PLACE I: Zomba Special Study: Viral Suppression among FSW & MSM

In Zomba, 152 women were interviewed during a busy time at a sample of venues and 123 (81%) reported that they identified as a sex worker or had been paid for sex in the past three months. Among FSW, the HIV prevalence was 55%. Approximately 30% reported currently on ART. Of those currently on ART, 75% were virally suppressed. Of the 366 men interviewed in Zomba, 218 (60%) men reported that they had sex with other men. Among MSM, the HIV prevalence was 7%. Two percent reported currently on ART. Of those currently on ART, 75% were virally suppressed.

1.4.21 Results Size Estimates: FSW

A total of 36,700 female sex workers are estimated in Malawi using PLACE. The table below shows the estimates for PLACE I districts, PLACE II districts and the 7 districts where PLACE was not implemented. These 7 districts are shown in italics.

In five districts, PLACE was not implemented because the expectation was that these districts would have fewer key populations. For these five districts, the team assumed the size estimate to be the mid-point between the districts in the region with the two lowest percentages of women who are FSW. Consequently, for Ntchisi, the estimate was the mid-point between Dedza (0.3%) and Dowa (0.4%). The same rationale was extended to Chitipa in the Northern Region where it was assumed that the percentage of women who are FSW would be the midpoint between Rumphi and Mzimba, where 0.9% of women were FSW. The same rationale was used in the Southern Region for Chiradzulu, Nsanje, and Phalombe, that is, assuming that the percentage of women who are FSW was the midpoint of Balaka and Chikhwawa.

For Thyolo and Mulanje, however, it was assumed the percentage of women who are sex workers to be the average of all districts in the Southern Region with available information (1.25%). Thyolo and Mulanje had not been identified as districts likely to have fewer FSW and so the average percentage for the region was used.

Table 1.3 Recommended Size Estimates for FSW (Rounded)

	% of Women in Sex Work (Est.)	Female Pop (2017) Age 18-49	Rounded Estimate
Central Region			
Dedza	0.30%	150,347	500
Dowa	0.40%	162,439	600
Kasungu	0.90%	166,578	1,500
Lilongwe	2.40%	293,533	7,000
Mchinji	0.50%	117,215	600
Nkhotakota	1.70%	76,598	1,300
Ntcheu	1.00%	114,895	1,100
Salima	2.30%	86,841	2,000
Ntchisi	0.35%	55,876	400

	% of Women in Sex Work (Est.)	Female Pop (2017) Age 18-49	Rounded Estimate
Regional Total			**14,800**
Northern			
Nkhata Bay	1.30%	57,228	700
Mzuzu	2.50%	56,181	1,400
Karonga	1.20%	70,068	800
Rumphi	0.90%	44,107	400
Mzimba	0.90%	188,554	1,700
Chitipa	0.9%	43,317	400
Regional Total			**5,400**
Southern			
Balaka	0.40%	82,053	300
Chikhwawa	0.80%	108,127	900
Mwanza	3.50%	21,771	800
Neno	0.80%	35,727	300
Blantyre	2.00%	308,466	6,200
Mangochi	0.40%	215,077	900
Machinga	0.80%	125,296	1,000
Zomba	1.30%	135,060	1,800
Chiradzulu	0.4%	66,094	200
Mulanje	1.25%	120,951	1,500
Nsanje	0.4%	56,359	200
Thyolo	1.25%	131,386	1,600
Phalombe	0.4%	76,944	300
Regional Total			**16,100**
National Total			**36,300**

1.4.22 Results Size Estimates: MSM

The table below shows the estimated number of MSM who can be reached at social venues at a busy time. It does not include MSM who do not go to venues. In PLACE II districts, the team was under a greater time constraint and was limited in the number of days available to recruit MSM. In the districts identified with an * in the table below, fewer than 20 MSM were interviewed.

Table 1.4 Size Estimates for MSM

District	Can be Reached at Venues at a Busy Time (Est. #)
Lilongwe	2,916
Mzuzu	372
Blantyre	3,141

District	Can be Reached at Venues at a Busy Time (Est. #)
Mangochi	238
Machinga	0
Zomba	270
Balaka*	54
Chikhwawa86	689
Dedza	208
Dowa*	72
Kasungu*	82
Mchinji*	29
Mwanza	35
Neno*	20
Nkhotakota	225
Ntcheu*	252
Salima	806
Karonga	129
Rumphi*	21
Mzimba*	57

2. Rationale for the PLACE Method

2.1 HIV Epidemics Are Local so Programs Should Use Local Data

The HIV pandemic is global, but the epidemic differs widely by country, and within a country HIV prevalence differs by region, district, and even community. In fact, no two local HIV epidemics are the same. Local epidemics are driven by sexual- and injecting-drug-use-networks in unique local contexts — whether urban, rural, along a major highway, within a fishing village, or along drug trafficking routes. Although the HIV epidemic is global, all transmission is local. To be effective, local responses should be tailored to the local context and drivers of transmission.

The method focuses on places where new sexual partnerships are formed because the pattern of new partnerships in a community shapes its HIV epidemic. The method can be extended to include places where people who inject drugs can be reached. A place-based approach has programmatic advantages. Approaches based on risk group status, such as being a trucker or sex worker, can be stigmatizing and often inadequate in generalized epidemics. Clinic-based approaches miss most people with high rates of new sexual partner acquisition.

This method was developed at the University of North Carolina and pilot tested in 1999 in Cape Town in collaboration with the University of Cape Town. USAID has supported development of the method through MEASURE/*Evaluation* Project.

2.2 People Who Acquire and Transmit HIV Are Often Hidden

The PLACE method addresses the challenge of how to identify and tailor prevention programs to local epidemics. Not only are many people asymptomatic, which contributes to a hidden epidemic, but persons occupying central positions in HIV transmission networks are often members of mobile, stigmatized, and hard-to-reach populations. Because many people do not know their HIV status and because many of those who are infected are hidden, there is a need for methods based on sound epidemiologic science that use technology appropriate to the local setting to uncover local transmission networks in a way that leads to effective, ethical, and evidence-based prevention.

The PLACE method increases the understanding of the local HIV epidemic among service delivery providers, community leaders, and other stakeholders so that a response is tailored to the epidemic. The heart of the strategy is to identify where to reach those most likely to acquire and transmit infection, measure gaps in services to these people, and develop action plans to address the gaps.

2.3 Higher Incidence Areas Can Be Identified Based on Contextual Information

PLACE is a tool to help focus resources where they are most cost-effective for preventing the spread of HIV. Epidemiological theory suggests that HIV infections cluster geographically and that identifying these geographic areas where transmission is most likely to occur is a reasonable prevention approach. A barrier to the identification of these priority areas and development of informed sexual network-based interventions within priority areas has been the lack of rapid, reliable, and valid field methods for identifying area with high rates of new sexual partnership formation.

The Priorities for Local AIDS Control Efforts (PLACE) method is a monitoring tool to identify priority areas and specific locations within these areas where AIDS prevention programs should be focused. Population-based sero-surveys to empirically identify areas with high HIV incidence are rarely conducted due to cost, feasibility, loss to follow-up, and ethical concerns. Contextual factors often associated with areas with high HIV incidence include:

- High population density
- Poverty and unemployment
- Lack of health care services
- Alcohol consumption
- High population mobility
- Urbanization and rapid growth
- Male and female sex work
- Drug injection
- High male-to-female ratio

2.4 Mapping Can Improve Service Delivery

Programmatic mapping has been used in epidemiology for both communicable and noncommunicable diseases for many years. Over the past 10 to 15 years, the method has been improved and implemented on a large scale to help focus HIV prevention efforts. Donors, including the Global Fund, USAID, and the World Bank, have recognized the value of programmatic mapping for improving programs for key populations. Key populations are defined by the Joint United Nations on Programme on HIV/AIDS (UNAIDS) as groups who, by nature of their high-risk behavior, are at increased risk of HIV acquisition irrespective of the local context. This protocol focuses on key populations in Malawi and includes the standard components of programmatic mapping.

In the context of the HIV epidemic, programmatic mapping documents where key populations can be reached, whether services are available and accessible to key populations in these locations, and where there are gaps in services. Programmatic mapping reflects a renewed focus on the need for an informed local response to local epidemics. According to recent UNAIDS guidance: *"Addressing the specific issues within local epidemics is crucial to a greatly improved HIV response. Focusing on the areas where the HIV epidemic is highly concentrated,*

identifying the places where services are lacking or not reaching the people in need of prevention services, testing, treatment and support are the first steps towards achieving more efficient and effective programs."

More information on programmatic mapping is included in a workbook developed for countries to assist them in developing proposals to the Global Fund. The latest version may be accessed from Sharon Weir at sharon_weir@unc.edu.

Programmatic mapping can improve program planning and service delivery. Some of the reasons to map venues include:

- Programmatic mapping reveals geographic pockets of a city or district with key populations that have been missed at clinic or program centers.
- Mapping identifies specific venues unknown to service delivery providers where key populations can be reached. Outreach to key populations at venues in these areas can increase access to services.
- Mapping identifies where condom, lubricants, and safe injecting equipment should be accessible. A visual map can identify where supplies are needed.
- Mapping is a form of "ground-truthing" that gives incontrovertible evidence of risk environments that need services with evidence that cannot be denied or ignored by funders.
- Mapping is a locally implemented exercise that can be collaborative and build working relationships between key populations and health delivery providers.
- Mapping can be used to uncover human rights abuses such as police harassment, discrimination, rape, child trafficking, coercion by third parties, and forced migration; and improve relationships with the judicial and police systems.
- Mapping provides concrete information that can be used to assess program coverage and improve the reach of services.
- Systematic mapping also offers an opportunity for estimating the number of members of a key population group who visit these venues. Initial estimates obtained from counting the number of each key population group at venues are usually adjusted based on information obtained on frequency of venue attendance, frequency of visiting more than one site, length of time spent in the locality, and duration of membership in the key population.
- Mapping can improve collaboration between key population groups and program planners. During programmatic mapping, key populations and service delivery providers work together to identify opportunities for extending coverage.
- Programmatic mapping is often part of program planning, monitoring, and evaluation rather than an external research activity.

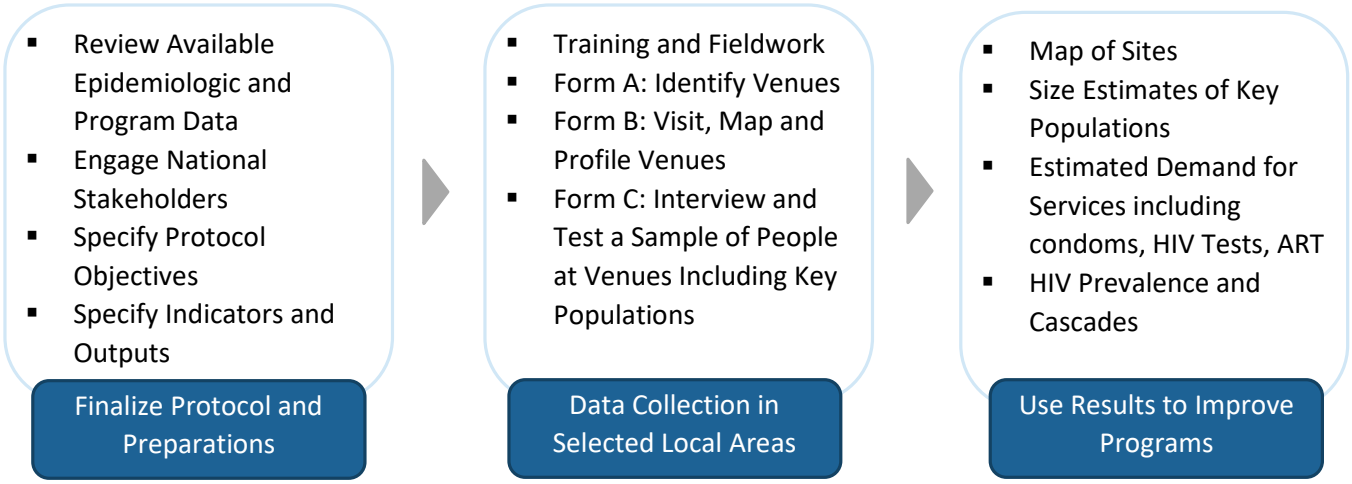
3. PLACE in Malawi: Methods

3.0 Overview of the PLACE Method

If implemented according to the protocol, the PLACE method is rigorous, systematic, and provides results that can be replicated. The method includes a preparatory phase, a data collection phase, and an analysis phase. The first step in the PLACE method is to consult with stakeholders to tailor the protocol appropriately. Desk reviews and consultations use available epidemiological and contextual information to identify areas likely to have a higher incidence of HIV infection.

Subsequent steps use rapid field methods to identify venues (Step 2) and describe and map venues (Step 3) within these areas where people with many new sexual partners can be reached for prevention interventions. Characteristics of people socializing at venues are also obtained as well as information on the number of key populations visiting the venues. In some settings, a survey of people socializing at the venues is conducted along with HIV testing. These data provide additional information about gaps in programs. Finally, the information is used to inform interventions in the area (Step 5).

Figure 9 Overview of PLACE Methods



PLACE includes the following components:

- Engagement with key population communities, stakeholders, and service delivery providers to ensure that the results are used to improve the delivery of services;
- Systematic review of available data and information to identify areas in the country where HIV transmission may be greatest and treatment and prevention needs are most acute;

- Development of a pragmatic typology of key populations in these areas so that services can be effectively tailored;
- Identification of the public places and locations where key populations congregate and could be reached with services;
- Estimation of the size of each key population that could be reached at the site; and
- Analysis of the findings to make concrete plans to improve program coverage.

The table below shows the five steps of PLACE and key features of the implementation in the selected districts in Malawi. PLACE I was implemented in six districts with funding from USAID/PEPFAR. PLACE II was implemented in an additional 15 districts with funding from the Ministry of Health/ Global Fund. The districts in PLACE II are: Balaka, Chikwawa, Dedza, Dowa, Kasungu, Mchinji, Mwanza, Neno, Nkhata Bay, Nkhotakota, Ntcheu, Salima, Karonga, Rumphi and Mzimba.

Table 3.1 Steps in the PLACE Protocol: Overview

Step	PLACE Objective	Methods
1	Preparation. To consult with stakeholders, prepare the PLACE strategy and protocol, and identify areas	▪ Synthesis of epidemiology of HIV in Malawi ▪ Consultation with Linkages, NAC, implementing partners, other stakeholders ▪ Mapping Readiness Assessment ▪ Ethical Review / IRB ▪ Piloting of Survey Instruments ▪ Preparation of Tablets for Data Collection ▪ Training Interviewers and Supervisors ▪ Identification of Key Population Members to Participate as Team Members
2	Venue Identification To identify all public locations where people meet new sexual partners and/or public locations where people who inject drugs can be reached	▪ In PLACE I, fieldwork teams interviewed community informants throughout the district to identify venues where people meet new sexual partners ▪ In PLACE II, the team first consulted district structures to identify Priority Prevention Areas (PPAs) in each district. The team focused community informant interviews within these PPAs. PLACE II provided a more active role for district structures and helped organize fieldwork by sub-areas within the district

3	Venue Visits and Mapping To visit, map, and characterize these locations in each selected area	▪ In PLACE I, the plan was to visit all venues identified by community informants. More venues were named than expected, however, so a sample of venues was visited. ▪ During the visit, efforts were made to interview a knowledgeable person (such as a bar manager) about the venue and its patrons as well as 1-3 female sex workers and MSM who at the venue at the time of the visit. ▪ In PLACE II, the team designed a sampling strategy from the outset to align the number of venues to visit with the funding and time available. ▪ Venues were sorted by priority and a sample of 90 high priority venues and fewer lower priority venues were randomly selected for onsite interviews. Those not selected were still visited for the purpose of mapping and determination of whether the venue was operational or not. ▪ Instead of interviewing 1-3 FSW / MSM at the time of the venue visit, 1-3 female staff / women who lived at the venue were interviewed. This change was made to decrease the stigma associated with identifying an MSM or FSW at the venue and because most of the female workers and women who lived at the venue were FSW anyway.
4	Bio-Behavioral Survey To describe people at venues including HIV prevalence, HIV prevention and treatment cascades, access to services.	▪ In PLACE I, a survey of people at venues at a busy time was implemented in Zomba. Men and women were interviewed and tested for HIV. All those with a positive test were asked to provide a dried blood spot sample that was analyzed for viral load. ▪ In PLACE II, approximately 100 people were sampled from venues at a busy time and interviewed about their behavior and access to services. In most districts, those surveyed were given the opportunity to be tested for HIV.
5	Data Use To use findings to inform interventions	▪ In PLACE I, the data were provided to Linkages as the data were collected. ▪ In PLACE II, data use workshops were planned but were not fully realized. Weir met with district representatives and provided a copy of district data to the stakeholders.

3.1 Methods: Step 1 – Preparation

3.1.1 Overview

The preparation phase included the following:

- Discussions with members of key populations to obtain their input into the value and use of programmatic mapping and findings
- Field testing of data collection instruments and recruitment strategies
- Operationalisation of terms such as “key population,” “site,” “access to services”
- Development of draft tables to show results and draft maps
- Discussions with groups to identify subgroups of key populations and operational definitions for each subgroup
- Development and pretesting of fieldwork management forms
- Obtaining and storage of supplies

- Strategy for recruitment and payment of interviewers
- Development of typology of venues where people meet new sexual partners
- Development of a logistics plan for transportation
- Development of data entry programs
- Review of all translations
- Updating interviewer training materials

3.1.2 Mapping Readiness Assessment, Key Population Consultation and District Consultation

The Mapping Readiness Assessment protocol was implemented in PLACE I and informed the protocol for PLACE I and PLACE II. The objective of the MRA is to:

- Identify key community partners for programmatic mapping
- Define and describe key populations (KPs) to be mapped
- Assess the legal environment for KPs and mapping
- Assess data safety and security considerations and capabilities
- Gather perspectives from relevant stakeholders
- Gather perspectives from KP members about mapping
- Gather perspectives from service and health care providers about mapping and using the information for program development
- Gather perspectives from programmatic mapping team to assess preparedness
- Summarize decision about the risks of programmatic mapping
- Use the information to create a comprehensive list of the risks of programmatic mapping in the local setting and identify strategies to reduce or eliminate each risk

In PLACE II, the preparatory work to gain the trust of key populations and to manage risk was facilitated though close collaboration with CEDEP, who provided a strong link with key populations communities.

In addition, the District Coordination Unit of the NAC helped in linking members of the study team to the relevant stakeholders and officials at the district level. District meetings were held in every district prior to data collection in order to describe the objectives of the study and gain the cooperation of the district leaders. During a planning meeting with the district, the district leaders identified the Priority Prevention Areas (PPAs) in the district. These are areas of perceived higher risk where the District recommended that the field work team focus their efforts. Some of the districts are quite large and the population is spread out across significant areas that can be difficult to access. Identification of the PPAs allowed the fieldwork teams to prioritize areas within the district. Below is a list of the type of PPAs that were reported.

Table 3.2 Types of Priority Prevention Areas

Types of Priority Prevention Areas
1. Bom
2. Fishing Village
3. Tea Estate
4. Sugar Plantation
5. Railroad Work Cam
6. Road Camp
7. Mining Camp
8. Military/Police Barracks/Camps
9. Trading Center/Market
10. Border Crossing
11. Truck Stop Area
12. Residential Area
13. Town
14. Tourist Area (Lake, National Park)
15. Village
16. Township

Each district was asked to identify a district official to be the District Liaison Officer. The District Liaison Officer provided an important link between the fieldwork team and the district officials. The Officer also provided help in identifying where to find venues.

3.1.3 Ethical Review and Approval

The PLACE protocol was reviewed and approved in Malawi by the National Health Sciences Research Committee (NHSRC) institutional review board. It was also reviewed and approved by the UNC IRB.

3.1.4 Training and Instrument Adaptation

The PLACE protocol was adapted to local needs and circumstances. The study instruments were translated into five local languages. Interviewer selection was guided by interviewing experience, the sensitivity of the study questions on sexuality, fluency in local languages, flexibility regarding working hours, and ability to communicate well with a wide range of respondents.

3.2 Methods: Step 2 – Venue Identification

3.2.1 Overview

In this step, interviewers systematically interview a wide variety of community informants in the selected areas to identify all venues where people go to meet new sexual partners or where people who inject drugs could be reached. The information is organized into lists of venues. These lists form the basis for subsequent steps where a sample of the venues are selected for a venue visit.

A venue could be a bar, a brothel, an all-night party, or a marketplace. Venues may include youth venues, hidden venues, small venues, popular venues, venues where men who have sex with men meet partners, and venues where sex workers solicit clients. Events and websites are also included as venues. In rural areas, venues may cluster around taxi stops or places that sell beer or alcohol.

Specifically, the following types of venues were included:

- Public buildings such as bars, brothels, restaurants, train stations
- Public outdoor locations such as streets, parks, bus stops
- Public events such as markets and street dances
- Public websites such as Facebook

The following types of places were excluded:

- Private homes
- Private parties
- Jails and prisons, unless permissions are obtained

The focus is to identify places were new partnerships are formed and where those with the highest rates of new partnerships could be reached by outreach programs. New partnerships are important because individuals with high rates of new partner acquisition are more likely to acquire and subsequently transmit infection and because individuals with newly acquired infections are more infectious. The protocol aims to identify all sexual-networking venues in an area and not just the most popular or well-known “hot-spots”.

3.2.2 What is a “hot spot”?

Some people use the term hot spot to refer to a venue where key populations congregate and could be reached with services. The team prefers terms such as “venue,” “site,” “location,” or “place” as these terms are less stigmatizing.

3.2.3 Who are community informants?

Community informants are people knowledgeable about the movement and behavior of people in an area. The types of people likely to be the most knowledgeable were identified during the mapping readiness assessment. These included members of key populations, bar managers, taxi drivers, police, security guards, janitors/housekeepers, street cleaners, market sellers, sex workers, health workers, truckers, and street sellers.

Community informant interviewing is the primary method used to identify all venues where residents of the area meet new sexual partners. Community informant interviews are a rapid method for obtaining sensitive data not otherwise available and are especially useful for obtaining data such as a list of venues that can be verified by other sources. By developing a list of venues from many community informants, the bias from any individual informant is reduced. In addition, self-presentation bias is minimized by not asking about an individual's own sexual behavior.

To be eligible to participate as a community informant, the person must be:

- Identified by the interviewers as someone likely to be knowledgeable about the community
- 18 years of age or older
- Willing to participate after being informed about the project

3.2.4 What was included in the training for Form A?

Interviewers were trained to identify community informants and ask them to identify venues where people, including members of key populations, meet new sexual partners. In addition, the training covered issues regarding stigma and discrimination against key populations, safety, how to obtain informed consent, and how to use Form A in different languages. Interviewers were also trained in interviewing techniques, privacy and confidentiality, and being a good member of the team.

Summary of topics covered in training:

- Who is a community informant?
- How to ask questions
- How to approach community informants and request informed consent?
- Having a nonjudgmental attitude
- Working together as a team
- How to ensure data quality?
- Review each questionnaire item by item
- Role play interviews
- Interviewer safety & Contingency planning

3.2.5 What is the content of the Form A interview?

Each interview of a community informant takes between 10 and 20 minutes. Interviewers explain the purpose of the study and request informed consent. The informant is asked to name venues in the area where people meet new sexual partners, and then to indicate the location, nearest landmark, approximate size (based on number of patrons at a busy time), and typology of each venue named, the busiest day and time at the site, whether sex occurs on site, and whether the following people come to the site:

- Women who sell sex for money
- Women who trade sex for goods
- People who inject drugs
- Men who have sex with men

3.2.6 How many community informants should be interviewed?

Approximately 50 community informants should be interviewed per 100,000 population age 15-49. Each district is divided into zones of 100,000 population age 15-49 to facilitate fieldwork and ensure that all areas of the district are covered. Zones ideally reflect an administrative area or health catchment area that makes sense to key populations and service delivery providers. The table below shows the number of zones and target number of community informants to be interviewed for each of the six selected districts in Malawi. (Note that the number of males and females age 15-49 per district is based on the projected population for each district times the national proportion of the population age 15-49).

Table 3.3 Target Number of Community Informant Interviews

District	Total Estimated Population[1]	Estimated Male 15-49 yr[2]	Estimated Female 15-49 yr[2]	Number of Zones	Target Community Informant Interviews (#)	Expected Sites (#)
PLACE I						
Blantyre	1,077,899	239,294	253,091	5	250	500
Lilongwe	2,062,508	457,877	484,277	9	450	900
Machinga	522, 422	115,978	122,665	2	100	200
Mangochi	855,663	189,957	200,910	4	200	400
Mzuzu	156,791	34,808	36,815	1	50	100
Zomba	704,259	156,345	165,360	3	150	300
PLACE II						
Balaka	338,430	75,152	79,465	2	100	200

Chikwawa	461,705	102,526	108,410	2	100	200
Dedza	655,979	145,666	154,027	3	150	300
Dowa	613,692	136,276	144,098	3	150	300
Karonga	288,433	64,049	67,725	1	50	100
Kasungu	680,881	151,196	159,874	3	150	300
Mchinji	494,011	109,700	115,996	2	100	200
Mwanza	536,846	119,212	126,054	2	100	200
Mzimba	929,800	206,471	218,321	4	200	400
Neno	118,542	26,323	27,834	1	50	100
Nkhata Bay	229,728	51,013	53,941	1	50	100
Nkhotakota	324,517	72,062	76,198	1	50	100
Ntcheu	499,936	111,015	117,387	2	100	200
Rumphi	182,110	40,439	42,760	1	50	100
Salima	360,677	80,092	84,689	2	100	200

[1] http://www.nsomalawi.mw/images/stories/data_on_line/economics/ihs/IHS3/IHS3_Report.pdf

[2] http://www.nsomalawi.mw/publications/136-malawi-table-30-population-by-age-and-sex.html

The population figures above were used to estimate the number of zones. During analysis the team used National Statistical Office age-specific district population estimates provided by the NAC.

3.2.7 What methods were used to assess whether the lists are complete and adequate?

Several methods were used to gain insight into the completeness of the lists at the end of the community informant interviews. These include:

1. An assessment of whether the target number of community informants were interviewed
2. A comparison of the number of venues named per population
3. An assessment of the number of venues named by only one community informant. If more than 50 percent of venues were only named by one person, this could be an indication of incompleteness.
4. Qualitative reports from interviewing teams about the level of completeness

The completeness of the lists was more fully assessed after the venue visits in Step 3 and after interviews with people at the venue in Step 4. During these visits, some venues, especially those named by only one person, proved to be duplicate venues. After this adjustment, the proportion of venues named by one person (method #3 above) decreases. Additional methods used to assess completeness of the lists after completing the rest of the fieldwork include:

1. Reclassification of some venues named by only one person as duplicate venues based on information obtained during the venue visit
2. Comparison of the list of venues named during a venue visit in answer to the question: “Where else do people go to meet new sexual partners?” with the full list of venues obtained from community informant

interviews. New venues are continuously emerging, but it is expected that no more than 15 percent of venues named by a venue informant will be new venues that were not previously on the list.

3. Interviews with patrons and workers at a venue during Form C may identify new venues.

3.2.8 Summary: What outputs were available by the end of Steps 1 and 2?

By the end of Steps 1 and 2, the following outputs were available:

- Community readiness assessment
- Plan for key population community engagement during PLACE
- Full list of venue reports (including duplicates)
- Number of venue reports where community informants reported the presence of key populations at the site
- Preliminary assessment of the completeness of the lists

3.3 Methods: Step 3 – Venue Visits and Mapping

3.3.1 Overview

In this phase of the fieldwork, interviewers visit venues to verify existence and location and to interview a person knowledgeable about the venue (such as a bar manager or owner) to order to obtain characteristics of the venue important for AIDS prevention. When someone is not available for an interview on the first visit, an appointment is requested for a re-visit. Verbal consent for an anonymous interview was obtained for each completed interview. Respondents were asked about the following:

- Name of the venue and number of years in operation
- Types of activities occurring in the site
- Estimated number of people visiting at peak times
- Whether MSM and FSWs visit the venue
- Patron characteristics including residence, employment status, age, and gender
- Whether people meet new and previous sexual partners at the site
- Extent of AIDS/STI prevention activities on venue including condoms and posters
- Willingness to sell condoms

3.3.1 What is a venue profile?

When the PLACE team visits a site, they interview a general venue informant and one to two key population members who are at the venue at the time of the visit. The information obtained provides a profile of the site: its physical characteristics, the characteristics of the patrons and workers at the site, how many people visit the site, its busy times, and the extent to which HIV prevention services are available at the site. The profile is a summary of the information that is needed by an outreach program to begin planning outreach visits to the site.

3.3.2 Who are the venue informants? How are they recruited?

In Malawi, there were four types of venue informants.

Table 3.4 Types of Persons Interviewed at Venues During Venue Visits As Venue Informants

Type	Description	FORM	PLACE I	PLACE II
1. General Venue Informant	A person aged 18 or older who is knowledgeable about the venue and is willing to participate in the survey. Bar managers, venue staff, and regular patrons often serve as a General Venue Informant.	Form B	X	X
2. A Female Sex Worker at the Site	A woman aged 18 or older at the venue at the time of the PLACE team visit who self-identifies as a sex worker and is willing to answer a few questions about the site, how many female sex workers come to the site, and her access to and use of health services.	Form B: KP Version	X	
3. A Man who has Sex with Men	This is a man who has sex with men and who is aged 18 or older, at the venue at the time of the venue visit and who is willing to answer a few questions about the site, how many male sex workers come to the site, and his access to and use of health services. Recruitment of MSM at the venue during the venue visit was difficult and time consuming in PLACE I. In PLACE II, the team included more MSM in visits to the venues at busy times rather than during the initial venue visit.	Form B; KP Version	X	
4. Female Resident/ Worker	In PLACE II, instead of requiring the women interviewed at the venue to self-identify as a female sex worker, the team requested interviews with any women who lived or worked at the site. This reduced the stigma of participation and clarified the process for recruitment. The team conducted the full survey used during the outreach survey and testing included in Step 4. The survey was identical to the Form C used in outreach testing, but an HIV test was not offered.	Standard Form C		X

To be eligible to participate as a General Venue Informant, a MSM Venue Informant, or a FSW Venue Informant, or Female Worker/Resident Informant the person must be:

- Identified by the interviewers as someone likely to be knowledgeable about the site
- 18 years of age or older
- Willing to participate after being informed about the project

- Willing to participate in the interview after providing informed consent

Each person was provided information about the PLACE study and asked to voluntarily participate. There was no incentive provided.

Recruitment of the General Venue Informant

When the interviewers arrive at the site, they used their judgment to identify a potential General Venue Informant. At each venue selected for a visit, trained interviewers sought one person, such as a manager, owner, or regular customer, who could answer questions about activities that occur on venue and the people that visit the site. Each interview took between 20 and 30 minutes. After requesting participation, the interviewer asked the first respondent a few brief questions about the venue (e.g. how long it has operated, busy times), activities that take place (i.e. alcohol consumption, dancing, sex on site), and HIV prevention activities on venue (i.e. condom availability, outreach education, HIV testing). The interviewer also recorded observations about the site, such as its physical nature and whether there are any visible HIV/AIDS prevention materials or condoms. The venue informant was also asked whether members of key populations visit the site. Geographic coordinates of each venue were recorded for mapping purposes. Data were collected using Form B.

Recruitment of FSW, MSM and Resident/Worker Venue Informants in the Six Linkages Districts

During PLACE I, at venues where FSWs or MSM were expected to be present, the interviewer, in consultation with social mobilizers from each key population expected at the site, sought interviews with one or two members of each key population at the site. Interviewers asked a short set of questions about the number of members of that key population that come to the site. If possible, the interviewer requested the participation of a second and third member of a key population to confirm the numbers reported. This information on the number of key population members visiting the venue was used to estimate the numbers of key population members on venue at busy times. If a key population member was not available during the first visit, the interviewer-social mobilizer pair could return to the venue up to a total of three visits.

During PLACE II, the process was slightly different. Instead of requesting an interview with a female sex worker specifically, the interviewers requested an interview with women who worked at the venue and women who lived at the site. During the interview, questions were asked to determine if the respondent was a female sex worker or not. The change was made for two reasons: first, it was less stigmatizing to ask to speak with a worker or person who lived onsite. Second, many of the people interviewed as FSW during the time of the venue visit were people who lived at the site.

3.3.3 What was included in the training?

Interviewers were trained by Dr. Sharon Weir during a one-day session. Under PLACE I, the training was facilitated by the UNC Malawi team of Dr. Agatha Bula, Mr. Ernest Mlenga, and Mr. John Chapola. Under PLACE

II, the training was facilitated by Dr. Nyanyiwe Mbeye. Approximately two-thirds of the interviewers who participated in PLACE I participated in PLACE II, including three of the four supervisors. The training included the use of data collection forms on handheld tablets. Training materials already developed by the University of North Carolina at Chapel Hill were adapted to the Malawian setting, and new materials were created as needed. Training covered how to be a good interviewer, how to ask probing questions, how to maintain confidentiality, how to approach a potential respondent, how to request informed consent. Each question was reviewed and practiced. The questionnaires were translated into five languages. The interviewers reviewed the translations.

3.3.4 What was the content of the Interviews with General Venue Informants?

During the meetings with stakeholders the team asked for input into the contents of the interview with the General Venue Informant, with the Key Population Venue Informants, and by interviewer observation. The questionnaire for the General Venue Informant (Form B) was piloted prior to data collection in PLACE I and revised for PLACE I based on the pilot. It was only modestly changed for PLACE II.

Information by Observation:

- Name of site
- Type of venue (note that the typology of venues was developed during preparation)
- Physical address
- Prevention visible at site: whether condoms and lube visible or not
- Outcome of venue visit (Select 1): venue found and interviews conducted, venue not found, duplicate site, venue closed, venue found but informant refused to participate, other reason (specify)
- Characteristics of area around site: trading center, truck stop, fishing village, tea estate, urban slum, more
- Physical characteristics of site: electricity, indoor toilet, video, alcohol sales, residence for sex workers

Information from General Venue Informant:

- Type of informant interviewed at site
- Type of key populations at venue
- Number of each type of key population at venue at the peak time and during a standard time such as Saturday night
- Number of female workers at the venue at a busy time
- Number of male and female patrons at the venue at a busy time
- Busiest times at the venue during week
- Hours of operation
- Prevention activities at site: (condom distribution, outreach testing, peer education) and when: now, in past 12 months, or never

3.3.5 What was the content of the Interviews with Key Populations at a Site?

Under PLACE I Information to Obtain from Key Population Members (FSW and MSM) at a Venue included information from a Short Form B for Key Population Venue Informants. The questions are listed below.

Information from Key Population (MSM and FSW) Venue Informants (PLACE I only):

- How often do you come here?
- Do you work here?
- When are the peak times at the venue for key populations?
- How many key populations at venue at peak times?
- How many key population members are at the venue at a standard time such as Saturday night from 9 p.m. until midnight?
- How many other venues do key population members visit during the standard time period?
- What services did you receive in the past month (yes or no): Condoms, treatment for STI, HIV testing, lube, HIV treatment
- Where did you access services?

This protocol did not include mapping the locations where key populations obtain services. The team asked people at venues if they have accessed services and where they accessed services. Gaps in services can be determined from this information.

Under PLACE II, the team asked resident women and female workers a full Form C interview. For information asked of Female Workers/Resident Women, see the description of Form C in the next section. The team did not seek out MSM to interview at the time of the venue visit. Instead, the team interviewed MSM during the interviews conducted at busy times using Form C.

3.3.7 Target Number of Venues to Visit

PLACE I

The expectation was that all accessible venues with a reasonably complete address would be visited. The team expected to identify and visit approximately 2400 venues. When more venues were identified than expected and venue visiting took longer than expected, the team reduced the percentage of venues that were visited but kept the target at approximately 2400. The reasons for the delay included updating the tablet program after the pilot, using and charging the tablets in the field, weather issues, road conditions, coordination with social mobilizers, and the number of revisits necessary to reach female sex workers and MSM at venues. There were also fewer interviewers than planned.

Consequently, the protocol for the number of venues to visit was revised during fieldwork. Venue lists were re-organized into venues that had been visited and venues that still needed to be visited. A random sample of the not yet visited venues was identified for a second fieldwork effort, with oversampling of venues with female sex workers, venues where sex on venue was reported, and venues where MSM could be reached. Venues along roads in rural areas would still be included, but venues more than 5 km off a main road would not be visited. Teams were redeployed to the districts for additional venue visiting with adjusted targets.

PLACE II

Funding was more limited in PLACE II. Consequently, the team limited the number of interviews with general venue informants. Effort was made to visit and GPS all venues that were feasible to reach, but only a sample were selected for on venue interviews. The process for selecting where to conduct interviews was the following:

Form A data were entered in excel. One row of data was entered per site, with a summary variable indicating how many informants reported the site. After all the venues were entered, the spreadsheet was programmed to sort the venues into 4 groups based on information provided by community informants about the type of site, where it was located, how feasible it would be to visit, and who goes to the venue. The four groups are:

Group 1 (High Priority):

- All MSM venues
- All venues with sex on venue
- All venues live sex workers who live on venue
- All street sex worker sites

Group 2: All venues not in Group 1, 3, or 4
Group 3: All Internet sites: These were excluded from venue visits.
Group 4: All venues NOT feasible to visit because there was not enough information provided to locate the venue or because it was on a market day that was not during the time frame of the study or it was too far away or some other reason that made visiting the venue not feasible: These were excluded from venue visits.

In each district, approximately 130 venues from Group 1 and 2 were selected for a visit to interview General Venue Informants and Female Workers/Venue Residents in each district. The method for selecting the venues was:

- If there were fewer than 130 Spots in Group 1 and 2, all venues were visited.
- If there were more than 90 spots in Group 1, a random sample of 90 spots was selected from group 1 and a random sample of 30 spots from Group 2. If there were fewer than 90 venues in Group 1, all venues in Group 1 were visited and the number visited in Group 2 was 120 minus the number in Group 1, for a total of 120 venues.
- In addition to the 120 randomly selected venues, 2-3 Special MSM and District Choice Special Venues were purposively selected for a visit. CEDEP was responsible for identifying the Special MSM Venues.
- In addition to the 120 randomly selected venues from Group 1 and Group 2 and the Special Venues, the following venues were also purposively visited:
    - all the rest of the MSM venues
    - all the rest of the street sex worker sites
    - all venues not already selected that were named by 20 or more community informants

Figure 10 Process for Selecting Venues to Visit

The advantages of this sampling approach include:

1. Sampling could be done immediately after data entry from Form A
2. Every selected venue has a known probability of selection, allowing weights to be calculated
3. District choice was honoured
4. CEDEP expertise and experience in identifying MSM venues was used
5. All MSM venues and all street sex worker venues were visited
6. The most frequently reported venues were visited
7. Fieldwork planning was enhanced because the same number of venues were visited for a full Form B interview in each district regardless of the number of venues named
8. Given sufficient time, most of the venues not selected could be reached long enough to determine whether it was operational and to collect a GPS reading.

3.3.8 What were the methods for data cleaning and analysis?

Limited cleaning of the responses was required. The data were entered directly into tablets in the field. The tablets were programmed to reduce errors. Skip patterns were programmed directly, and venue locations were preloaded. The questionnaire was designed to have only enough options for a response that would fit easily on the tablet screen. Generally, one question was asked per screen.

Venue weights were calculated based on the proportion of venues in the district that were visited and operational. Within PLACE I districts, all venues had the same weight. Consequently, percentages and means are

the same for weighted and unweighted data within a district. The weights are important to estimate the number of venues and key population size (see Chapter 9). Further analysis may provide support for using models to estimate venue weights. In PLACE II, randomly sampled venues have higher weights than purposively sampled venues.

3.3.9 Summary: What outputs were available by the end of Step 3?

By the end of Step 3 the following outputs were available:

1. Characteristics of venues
2. Preliminary Size estimates
3. Maps of venues
4. Coverage maps
5. Information from Interviews with General Venue Informants (PLACE I & II)
6. Information from FSW & MSM Venue informants (PLACE I)
7. Information from Female Workers and Resident Women (PLACE II)

3.4 Methods: Step 4 – Interviews and Testing of Men and Women at Venues

3.4.1 How were venues selected for outreach interviews and testing?

PLACE I

In PLACE I, interviews and HIV testing of people at venues during a busy time only occurred in Zomba. Initially the team planned to implement in Lilongwe, but learned that a large outreach testing project was under way at bars and clubs in Lilongwe. Zomba was selected because interventions were not fully under way in Zomba and because the interviewers were well received by the MSM community in Zomba.

Within Zomba, all venues identified as places where MSM visit were selected, a random one-third of all venues where FSWs were reported, and one-twentieth of the remaining venues were selected. This protocol does not map locations where key populations obtain services. People at venues are asked if they have accessed services and where they have accessed services. Gaps in services can be determined from this information.

PLACE II

Because funding was more limited under PLACE II, only 15 venues in each district were selected for a venue visit with interview targets target of 100 men, 100 women and 60-80 MSM in each district. Generally, 30-40 venues are selected in order to increase the variability of the population sampled, but under PLACE II 15 venues were selected. Of these, 13 were sampled randomly from the 130 selected for a Venue Visit. The other two venues were the Special MSM venues identified in collaboration with CEDEP and NGO partners working with MSM in the district.

The table below summarizes the targets under PLACE II.

Table 3.5 Targets for PLACE II

Phase	Form	Type of Respondent	Target Per District (#)
Venue Identification	Form A	Community Informants	Small District: 112 Medium District: 150 Large District: 200
Venue Visits	Form B	General Spot Informants	130
	GPS Only	No Interview	All Feasible Venues Not Selected for Form B
	Form C	Resident Women & Female Workers at Time of Spot Visit	3 Per Site= 390
Bio-Behavioral Survey	Form C	Men (Not MSM)	100 at A Sample of 15 Venues (Busy Time)
		Women including FSW	100 at a Sample of 15 Venues (Busy Time)
		Men at MSM Venues	60-80 MSM per district

3.4.2 How were people within venues selected?

Ideally, a random sample of men and women at the venues would be interviewed. This would provide a probability sample that would facilitate extrapolation of size estimates and increase the precision of estimates. The sample size required for a random sample to yield sufficient numbers of key populations, however, was too large for the time and resources available in either PLACE I or PLACE II. Different strategies were used for sampling persons at venues in PLACE I where only one district was selected for implementing interviews and testing at busy times and PLACE II where most of the districts included interviews and testing at busy times.

PLACE I

In Zomba, the team selected a random sample of men and women at selected venues and then screened additional people to determine if they were members of a key population. People who passed the screen were given the full interview and tested. In addition, if the interviewers or social mobilizers identified men at the venue known to be MSM or identified FSWs, these people were offered the chance to participate. People who were selected randomly or through screening were weighted more than those selected by convenience. The results are presented in terms of the random sample, the FSW and MSM samples, and all men and women.

PLACE II

In PLACE II districts, the team selected a random sample of men and women socializing at a sample of randomly selected venues. In addition, the team interviewed men at MSM Special Venues. At randomly selected venues, the number interviewed per venue was proportional to the number of people at the site. See Table below. Community informants estimated the size of the spot. Their estimate was used to set the targets for Form C.

Size of Spot	Total Patrons and Workers at the Venue According to the Community Informant (#)	Target People to Interview at Randomly Selected Spots (#)
Randomly Selected Spots		
Small	< 30	5 men | 5 women
Medium	30-100	11 men | 11 women
Large	101-200	25 men | 25 women
Huge	> 200	25 men | 25 women
MSM Special Spots		
MSM (No FSW)	Number of People at Spot Not Relevant	Interview all men. If > 50, discuss with supervisor
MSM Plus FSW	Small Spot	All men + 5 women
	Medium	All men + 11 women
	Large Huge	All men + 25 women

3.4.5 What was included in the training for Form C?

PLACE I and II

As with Form B, interviewers were trained by Dr. Sharon Weir during a one-day session. For PLACE I, the training was facilitated by the UNC Malawi team of Dr. Agatha Bula, Mr. Ernest Mlenga, and Mr. John Chapola. For PLACE II the training was facilitated by Dr. Nyanyiwe Mbeye. The training included the use of data collection forms on handheld tablets. Interviewers were trained how to use the tablets. Training materials already developed by the University of North Carolina at Chapel Hill were adapted to the Malawian setting, and new materials were created as needed. Training covered how to be a good interviewer, how to ask probing questions, how to maintain confidentiality, how to approach a potential respondent, how to request informed consent. Each question was reviewed and practiced. The questionnaire was translated into five languages. The interviewers reviewed the translations. Based on the training and a pilot of Form C during PLACE I, the program on the tablet was improved considerably. Additional questions were added for PLACE II. It took several weeks during PLACE I to finalize the questionnaire, program tablets, check programs, field test the tablets, and make the final changes.

3.4.6 What is the content of the Form C Interview?

PLACE I and II

Similar to Form B, during the meetings with stakeholders the team asked for input into the contents of the interview with the General Venue Informant, with the Key Population Venue Informants, and by interviewer observation. The following information was included in the Form C interview:

- Recruitment information
- Underlying determinants and sociodemographic variables
- Vulnerabilities and experience of adverse life events
- Characteristics of FSW and MSM
- Venue visiting behavior
- Proximate determinants of transmission including risk behaviors
- Use of services including HIV testing and ART
- HIV testing (not everyone)

See Appendix 1 for a list of variables included in Form C.

3.4.7 What were the methods for testing and providing results?

Interviewers consented the participants and introduced those who agreed to participate to the testers and counselors. The testers and counselors were professional and experienced. The required information was obtained for reporting results to the Ministry of Health (MOH) but this identifying information was not input into the study data set. Participants were given their results during the evening.

In Zomba, those who tested positive were asked to provide a dried blood spot that would be tested to estimate the viral load and determine whether the person was suppressed or not. The VL testing was done at the UNC lab in Lilongwe. A strategy was developed to provide results to respondents.

3.4.8 HIV Treatment Cascades

HIV treatment cascades were estimated for men and women who were interviewed and tested in Zomba. Partial cascades were estimated under PLACE II. Viral load information was not available during PLACE II to support estimation of viral suppression.

4. Results: Step 1. Mapping Readiness & District Consultation

4.1 Key Population Consultation Regarding Acceptability of PLACE

A total of 43 participants were interviewed during Mapping Readiness Assessment conducted during PLACE I. These included members of KP implementing partners, health care providers, members of the KP community, community leaders, and police. Overall, the mapping readiness assessment helped guide the questions on the surveys and inform the PLACE team about the need for active engagement of key populations in the process. The final decision was that the possible risks posed by the PLACE method could be handled by using peer educators to help identify venues and introduce members of key populations to the team, by training the testers and counselors about how to interact with key populations, and by ensuring data confidentiality at every stage.

Participants reported that FSWs normally meet new clients in bars, rest houses, hotels, and entertainment places. Interestingly, some reported that every place where there is a group of people socializing is a potential spot. These include social gatherings such as funerals, weddings, church services, marketplaces, along the streets, and in schools. As a result, events such as marketplaces, schools, and streets were included as types of places that could be reported by community informants on Form A and Form B.
A good number of respondents reported that the majority of bar-based sex workers are normally contacted by phone by potential sexual partners who may get contacts from bar owners, managers, and watchmen.
As a result, the team included a question during venue visits asking whether there was a list of persons available for sex work at the site.

In contrast to FSW venues, the MRA results demonstrated that MSM in Malawi do not often have specific spots where they meet new sexual partners. Although the majority of them patronize bars/clubs and public events, most of them do not feel comfortable to reveal their sexual orientation due to fear of stigma and discrimination. Instead, they reported normally meeting their partners through their own social networks and also during periodic meetings which they have at CEDEP offices. In addition, they also find new partners in entertainment places but they masquerade as straight people. Some reported meeting new partners on social media such as Facebook, Twitter, and WhatsApp, and through phone contacts. These, however, are closed social media groups that act as platforms where MSM can meet new partners. They sometimes allow some members of the public who are not MSM to join these groups upon special request. The majority of non-MSM members allowed are mainly members of the human rights activists and some medical personnel who take a role to protect the rights of MSM and give health-related advice to MSM, respectively.

As a result, in addition to the usual process to identify places where MSM could be reached, the team decided to ask MSM peer educators and other MSM known to the team to initiate contact with MSM groups to identify places where MSM meet and could be reached and to facilitate introductions.
In PLACE II, CEDEP was a full partner in the implementation of PLACE and provided guidance regarding MSM recruitment and how to improve the acceptability of the survey to participants. It was not necessary to repeat the Mapping Readiness Assessment during PLACE II as the information obtained from the assessment conducted during PLACE I was still relevant and because there was a strategy for district engagement where any additional local issues could be resolved.

4.2 Key Population Consultation regarding access to and quality of health services

The MRA showed that most hospitals do not provide key population-specific health friendly services in all the districts. Instead, both MSM and FSWs access care and treatment just as any other person from the general population, which makes it difficult for some to access care and treatment due to fear of stigma and discrimination. Some health care workers acknowledged lacking knowledge on how to assess whether the person is a KP member. The health care reporting system does not capture KP status. Health care workers may identify KP status from questions about the number of sexual partners and anal sex. CEDEP has trained some health providers within the government and private hospitals to provide KP friendly services and has a directory of KP friendly service providers. When trained health personnel are transferred to another location or are not on duty, there can be gaps in availability of sensitized providers. Some people suggested that there is need for a structural approach to promote access to care and treatment among KPs.

There were reportedly certain categories of FSWs and MSM that are not being reached. In Lilongwe older MSM above 35 years who are affluent and well educated as well as those in the remotest areas are not normally reached with HIV interventions. Additionally, those who are older, affluent, and educated tend to protect their identity within the community. A similar scenario exists in other parts of Malawi like Mangochi (Makawa and MADELCO lakeside areas) and Mzuzu but there are additional groups that were also reported as not being reached. In Mangochi the team found that bisexuals and young MSM under the age of 18 are normally not reached with targeted health interventions.

Both female sex workers and MSM mentioned distance to the health facility, fear of stigma and discrimination, and attitudes of health personnel as the main barriers that hinder many of them in accessing care and treatment. In the worst scenarios, some health care workers refuse to treat them once they know that they are FSWs or MSM. Some MSM complained of lack of privacy and confidentiality: "*Once you go to the clinic with anal STI you find a lot of HCWs in the room coming to see your condition without your consent."* Lack of condom-compatible lubricants and self-stigma were also identified as other barriers for not accessing care and treatment among MSM. Instead, the majority of them normally access lubricants from CEDEP offices. Condoms, however, can be accessed from government hospitals.

Most organizations working with sex workers such as Pakachere, FPAM, and CEDEP have trained peer educators who distribute condoms, help their fellow FSWs to access care and treatment, encourage FSWs who are sick to get tested, and to take ART as advised. Peer educators are a valuable resource for the PLACE work as they know the majority of others in their group, and they are well trusted by their peers.

Some MSM have had negative experiences at certain health centers. Many fear being discriminated against at the health centers even though individually they have never experienced such abuse. There is also a shortage of lubricants in most health facilities. "*Lubricants are perceived to be for only homosexuals and not for everyone else and they believed this was one of the factors that led to unavailability.*" In general, participants reported that Malawi society discriminates against MSM. Many Malawians see MSM as sinners and abnormal. Some perceive MSM to possess demons, which influence their sexual behavior. This has resulted in some MSM being denied health care services by some health care workers.

FSWs experience different forms of violence from clients, law enforcers, and the general community. The forms of violence include verbal abuse, rape and assault. Because some of the violence is fueled by police officers, it is difficult for FSWs in some areas to seek protection from law enforcers. Many of the FSWs explained that when they complain to the Police Victims Support Unit, female police officers sometimes refuse to help them. Instead of being helped, they tell them that they have gotten what they deserved because they have sex with their husbands. Some male police officers, on the other hand, tell FSWs that they have no rights, and they should not bother coming to the police because they do not help such people. FSWs sometimes experience other forms of violence, including forced unprotected sex, which increases their vulnerability of contracting HIV and other STIs, and for those on medication, sometimes spending days in police custody without access to their medication.

4.3 Implementing Partners Consultation

Program implementers were consulted prior to the implementation of PLACE I. Stakeholders were in favor of the planned mapping and size estimation for FSWs and MSM for developing more effective local prevention programs as the country continues to struggle to estimate the size of KPs, especially MSM who prefer to be hidden due to stigma, discrimination, and punitive laws. They felt this is one way to assist beneficiaries to access health services and HIV prevention measures within their working places. This was further felt to be cheaper for most KP members as they do not need to travel long distances to reach the nearest health facility and also that the providers would accept them regardless of their work and sexual orientation. Program implementers and health care workers felt that size estimation would also help them to plan activities to reach KPs in their working places, which will eventually help to reduce HIV infection. Some of the key stakeholders interviewed expressed interest to work with the team during the mapping exercise and suggested that the results should be shared with them once the mapping exercise is completed.

4.4 District Consultation and Coordination Under PLACE II

Under PLACE II, the fieldwork teams worked with the District Coordination Unit of the NAC to communicate with the appropriate persons in each district to provide information and district engagement. The purpose of the study was described to the leaders. Approval for implementation was sought and received at the district level in every district. In addition, the district leaders helped facilitate communication and coordination with program implementing partners. In some cases, the national office of the implementing partner teams was consulted. Each district fully participated in the survey. In the initial districts the team did not implement HIV testing. It was not budgeted in the PLACE II study. However, there was demand for the testing and the districts and implementing partners provided the necessary support. Districts provided the following:

- A District Liaison Person and a Social Mobilizer that joined the fieldwork team
- Approval for the study and communication within the district
- Introductions to Implementing Partners
- Where testing was implemented, the district provided testers and counselors and referral to care for people who tested positive

See Appendix 3 for the District Entry Report.

5. Results: Step 2 Venues Identified by Community Informants

5.1 Key Questions Answered

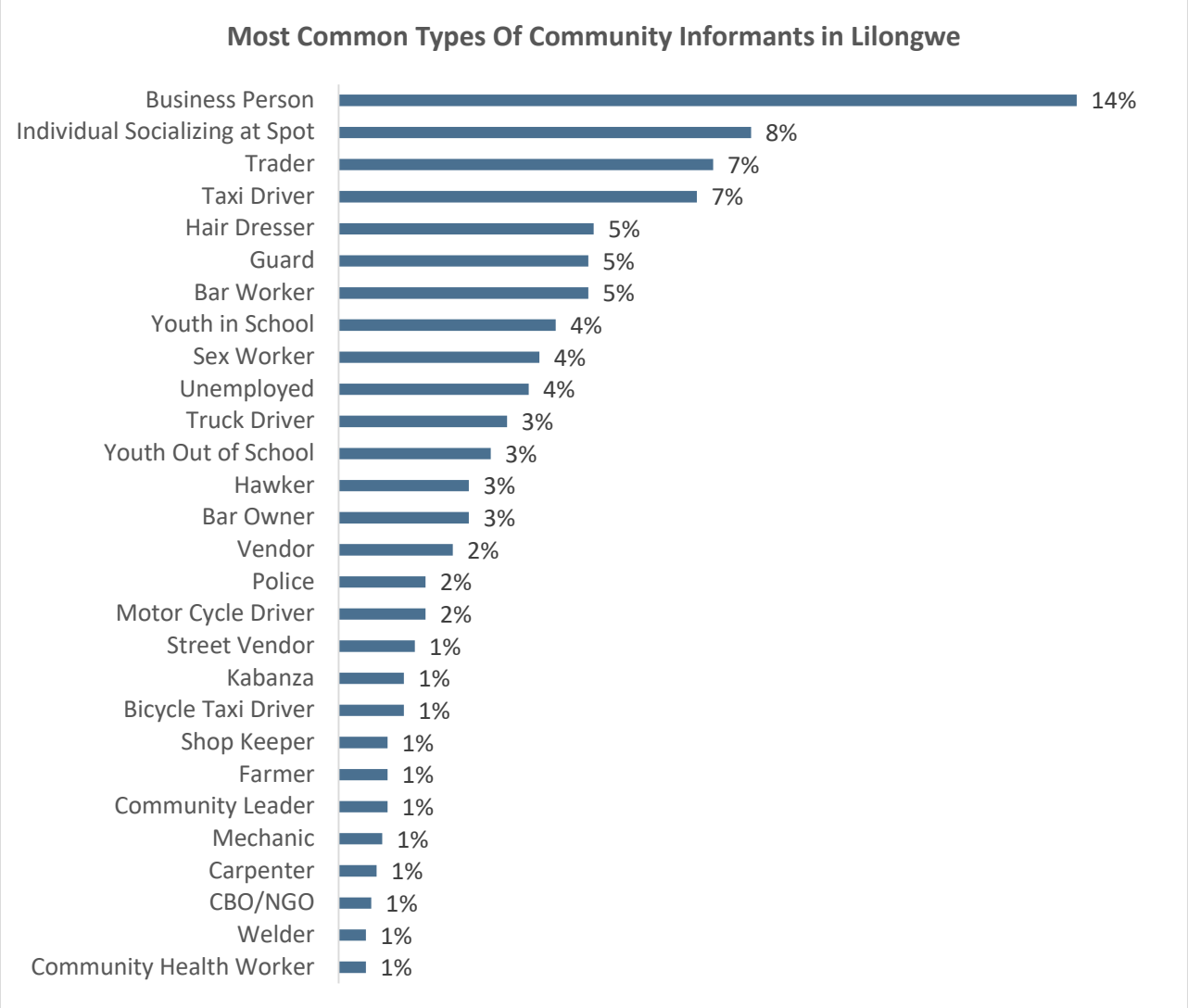
This section answers the following questions:

- What type of community informants were interviewed?
- How many community informants were interviewed?
- How many venues were identified by community informants?

5.2 Types of Community Informants

Appendix 2 lists the number and type of community informants interviewed in the 6 districts in PLACE I. The graph below shows the most common types of community informants in Lilongwe.

Figure 11 Types of Community Informants

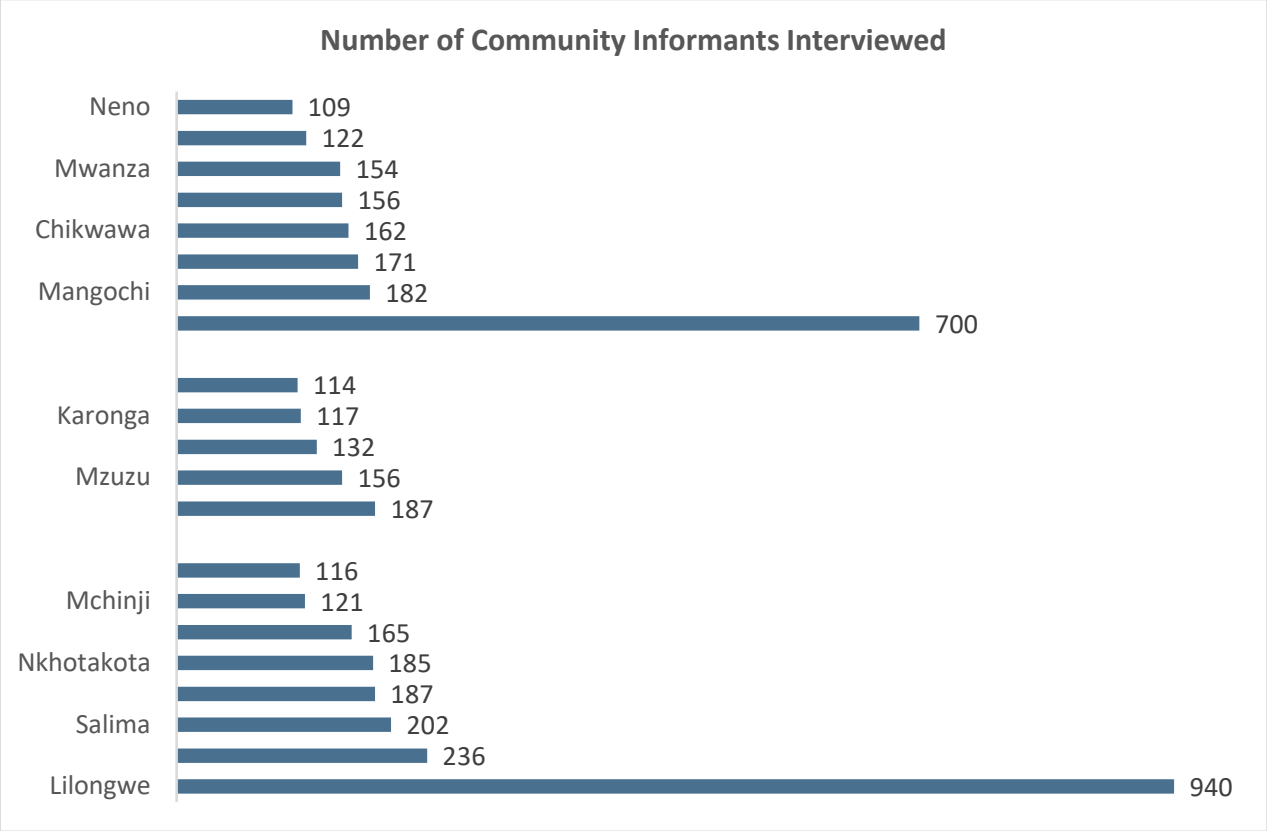


5.3 More than 3,500 community informants were interviewed

Under PLACE I, over 2,000 community informants were asked: "Where do people go around here to meet new sexual partners?". The community informants interviewed in each district were diverse and accomplished the objective of obtaining information from a wide variety of people throughout the district about the locations of venues where people meet new sexual partners. In addition to these people, members of key populations were asked to identify venues. See Appendix 2 for the type of informants interviewed by district in PLACE I.

In PLACE II, 1,500 community informants were interviewed for the same information as in PLACE I(?).

Figure 12 Number of Community Informants Interviewed, By Region and District



All targets for the number of community informants were met or exceeded in every district except Mangochi. See Table 5.1.

5.4 Over 20,000 Venue Reports (Form A) were provided by Community Informants

The table below shows the number of informants interviewed by district, the number of interview days and the number of reports of venues. One venue can be reported many times. The number of unique venues is much lower than the number of reports. It was estimated that the number of reports per venue ranged from a low of 3.4 reports per venue in Machinga to 8.6 in Kasungu.

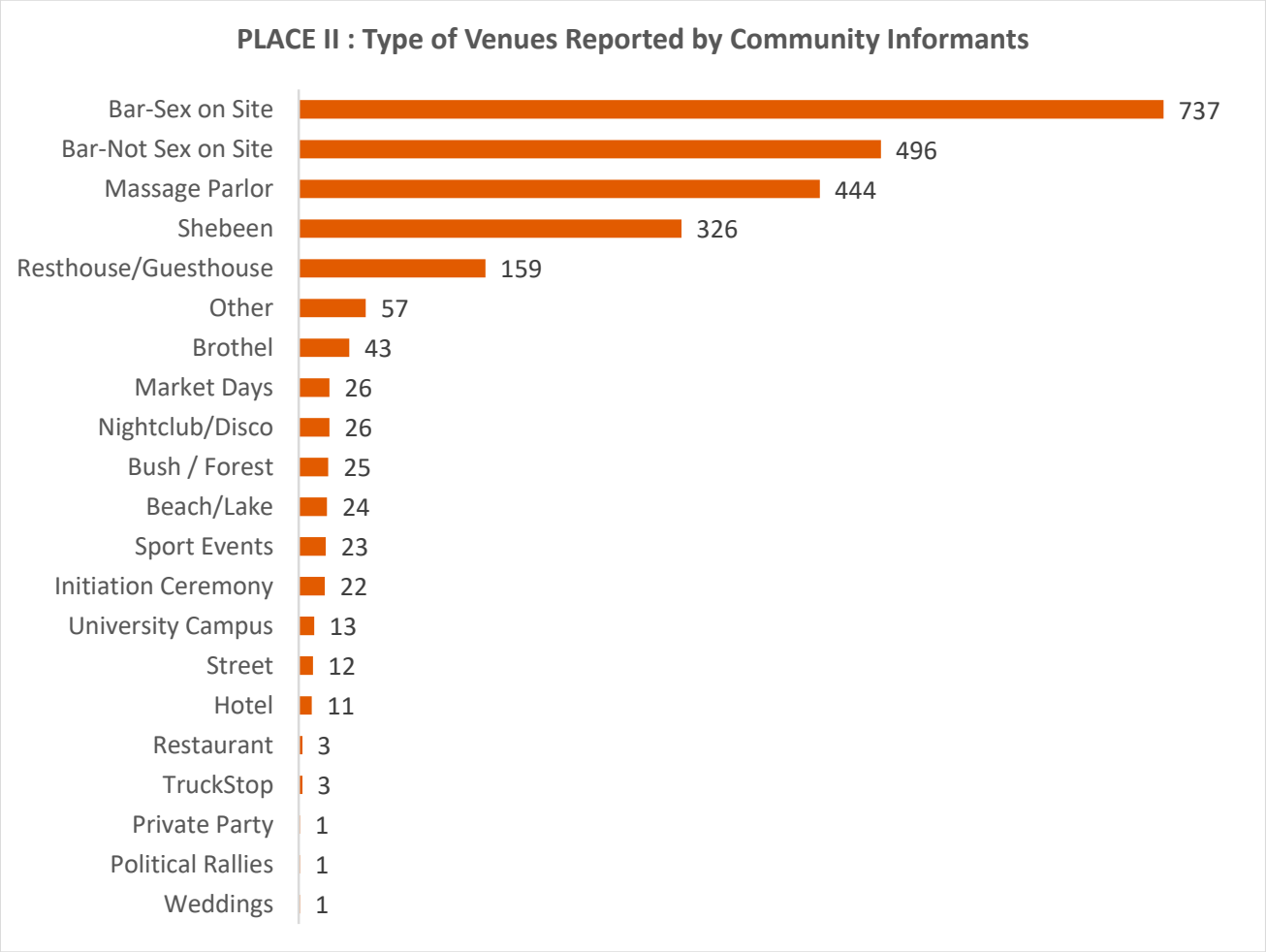
Table 5.1 Completeness of Community Informant Interviews: Were targets met?

District	Target	Interviewed (#)	Target (% of)	Start Date (Mo/Date/Yr)	Interview Days (#)	Interviewed per Day (Avg)*	Reports (#)
PLACE I							
Lilongwe	450	940	209%	1/11/2016	10	94	5,033
Blantyre	250	700	280%	1/25/2016	7	100	4,455
Mzuzu	50	156	312%	2/11/2016	3	52	1,053
Mangochi	200	182	91%	2/11/2016	4	46	1,162
Zomba	150	171	114%	2/29/2016	4	43	981
Machinga	100	122	122%	2/29/2016	4	31	758
Sub-Total	**1,200**	**2,271**					**13,442**
PLACE II							
Balaka	100	156	156%	9/13/2017	3	52	607
Chikwawa	100	162	162%	10/6.2017	3	54	844
Dedza	150	165	110%	8/3/2017	3	55	918
Dowa	150	116	77%	8/3/2017	3	39	540
Karonga	50	117	234%	8/23/2017	3	39	556
Kasungu	150	236	157%	8/3/2017	3	79	1,383
Mchinji	100	121	121%	9/13/2017	3	40	544
Mwanza	100	154	154%	10/6/2017	3	51	724
Mzimba	200	187	94%	12/2/2017	3	62	779
Neno	50	109	218%	10/6/2017	3	36	390
Nkhata Bay	50	114	228%	8/23/2017	3	38	570
Nkhotakota	50	185	370%	8/23/2017	3	62	783
Ntcheu	100	187	187%	9/13/2017	3	62	929
Rumphi	50	132	264%	12/2/2017	3	44	477
Salima	100	202	202%	7/26/2017	3	67	930
Sub-Total	**1,500**	**2,343**					**10,974**

5.5 Types of Venues Reported

The most common types of venues reported were bars, including those with sex on venue and those without sex on site.

Figure 13 PLACE II: Type of Venues Reported by Community Informants



5.6 How many venues did community informants report were venues with female sex workers or men who have sex with men?

PLACE I

Community informants who named a venue were asked about whether MSM or female sex workers visit the site. Almost all venues were reported to have female sex workers at the site. Few venues were reported to have MSM visiting the site.

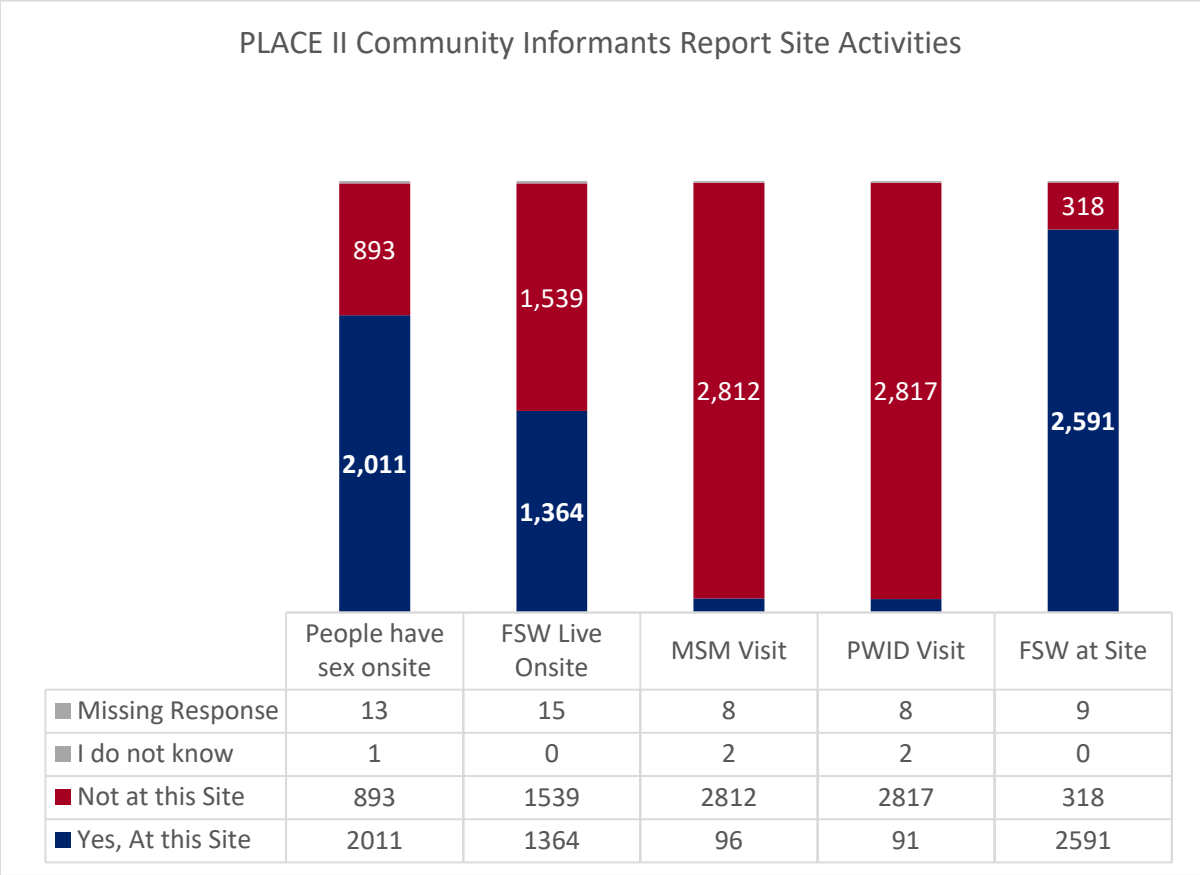
PLACE II

Community informants in PLACE II districts were also asked about the characteristics of the venues and the types of people who visit the site. Community informants were asked to identify venues where people go to meet new sexual partners. The team expected that some of the venues named would be venues where the

informant did not know whether key populations were at the venue or not. However, almost all of the venues were reported by at least one community informant to be a place where female sex workers, MSM or people who inject drugs could be reached. Most of these venues were venues with female sex workers. Across the PLACE II districts fewer than 100 MSM venues and fewer than 100 venues with people who inject drugs were identified.

Community informants were also asked if female sex workers live at the venue and if people have sex at the site.

Figure 14 PLACE II Key Populations at Venues as Reported by Community Informants



	People have sex onsite	FSW Live Onsite	MSM Visit	PWID Visit	FSW at Site
Missing Response	13	15	8	8	9
I do not know	1	0	2	2	0
Not at this Site	893	1539	2812	2817	318
Yes, At this Site	2011	1364	96	91	2591

6. Results: Step 4 Characteristics of Venues

6.1 Key Questions Answered

This section answers the following key questions:

- How many venues were visited?
- What is the immediate environment of the venue?
- What is the estimated number of operational venues in a district?
- What type are the venues?
- How many General Venue Informants were interviewed?
- What types of key populations visit the venues according to the General Venue Informant?
- At how many venues could female sex workers, MSM, people who inject drugs be reached?
- What venue-level factors facilitate sex work?
- What are the busiest days and times at the venues?
- What is the availability of HIV prevention services at the venues?

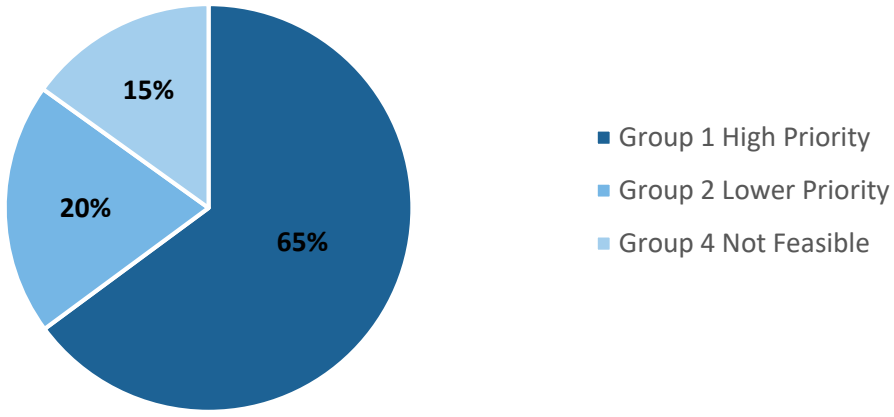
6.1 Outcome of Venue Visits

PLACE I & II

Under PLACE I, a total of 4,946 venues were on the initial venue list for PLACE I districts. Of these, 2018 were visited and an interview conducted with a General Venue Informant or Key Population member at the time of the venue visit. 1,383 were found to be duplicates or not operational. 1,483 were not visited. See Figure below.

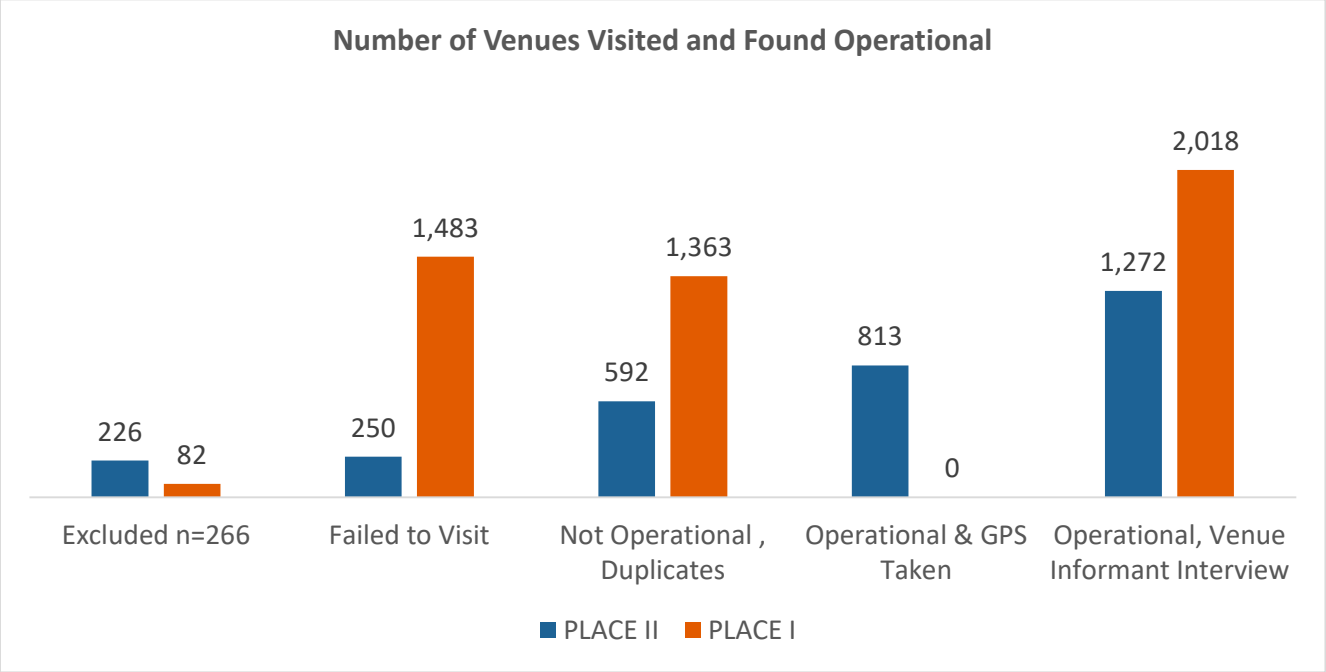
In PLACE II, 3153 venues were identified by community informants. Of these, 15% were declared prior to any attempt at venue visits to be not feasible for a visit based on information from the community informants. 65% of the venues were high priority venues (venues with MSM, PWID, sex on site or resident FSW); and 20% were lower priority venues. Under PLACE II the intention was to visit all the venues that were feasible to visit.

Figure 15 PLACE II: 65% of Venues Named were High Priority Venues



Under PLACE II, of the 2,887 venues considered feasible to visit, an attempt was made to visit 91% of them (all except 250 venues). Of those visited, 592 were found to be duplicates or not operational; the remainder, 2085 venues, were visited and found operational. At 1,272 of the 2,085 operational venues, a General Venue Informant was interviewed and GPS coordinates taken. At the other 813 venues, GPS coordinates were taken but a General Venue Informant was not interviewed (due to time constraints). The team decided to take GPS coordinates at venues where it did not have enough time to complete a Venue Informant Interview because doing so provided a more complete estimate of the actual number of operational venues in a district.

Figure 16 Outcome of Venue Visits: PLACE I and PLACE II



6.2 Number of Operational Venues

After attempts were made to visit the venues, the team estimated the total number of operational venues in each district. This required making assumptions about how many of the venues that were not visited were closed or duplicates of other venues.

Estimating the number of operational venues was more complicated for PLACE I districts than for PLACE II districts because a lower percentage of venues were visited. The estimated number of venues for PLACE I is based on determining the number operational among those visited and applying that percentage to the venues that were not visited. See below for more details on the estimation of operational venues in PLACE I and PLACE II districts. In PLACE II, venue interviews were attempted at approximately 130 venues per district.

PLACE I

1803 venues were visited in the six PLACE I districts where an interview was successfully completed with a General Venue Informant. An additional 156 venues were visited where a General Venue Informant was not interviewed but a sex worker or MSM was interviewed as a Key Population Venue Informant. The total number of venues in each district was estimated as follows:

First, each venue named by Community Informants eligible for a venue visit (e.g. not excluded due to location or lack of information) was categorized into one of the following groups based on whether the venue visit was attempted and whether a venue information interview was conducted:

1. Group 1: Venue found, determined operational and a General Venue Informant Interviewed
2. Group 2: Venue found, determined operational but General Venue Informant not interviewed
3. Group 3: Venue visit was attempted but the venue was not operational due to:
    a. Too poor an address
    b. Too remote a location
    c. Duplicate site
    d. Found but permanently or temporarily closed
4. Group 4: No attempt made to visit the venue

Second, the number of operational venues in each district was calculated by estimating the percentage of visited venues found to be operational and applying that percentage to the entire list of venues. See Table 6.1 below.

PLACE II

A similar approach was used to estimate venues for PLACE II, but because almost all the venues that were feasible to visit were visited, there is less uncertainty about the number of operational venues.

Table 6.1 shows the number of venues reported, the number excluded from a visit because it was too far or there wasn't enough information to find it, the number that the team attempted to visit in each district, the number found and operational, the number with a completed venue informant interview, and the estimated total number of operational venues in the district. This estimate is used to estimate the venue weights for each venue. There is a range for the PLACE II weights because high priority venues were oversampled relative to lower priority venues.

Table 6.1 PLACE I & PLACE II Estimated Number of Operational Venues

	Information from Community Informants		Attempted to Visit		Among Those Visited		Estimates	
District	**Venues Reported**	**Excluded from Visit**	**Yes**	**No**	**Number Operational**	**Number With Interview**	**Number of Operational Venues**	**Venue Weight**
PLACE I								
Lilongwe	1,752	14	1,388	350	793	703	993	1.4
Blantyre	1,680	21	849	810	565	515	1,104	2.1

Mangochi	439	3	353	83	179	148	221	1.5
Machinga	286	11	145	130	131	118	248	2.1
Mzuzu	347	19	327	1	162	152	162	1.1
Zomba	442	14	319	109	188	167	252	1.5
Total	**4,946**	**82**	**3381**	**1,483**	**2,018**			
PLACE II								Range
Balaka	252	37	211	4	153	80	160	1.7-3.1
Chikwawa	280	21	259	0	191	75	197	2.4-3.6
Dedza	270	45	219	6	175	84	180	2.0-2.5
Dowa	234	8	213	13	167	89	178	1.8-2.6
Karonga	242	48	193	1	150	95	160	1.3-2.7
Kasungu	201	0	176	25	140	103	153	1.5-1.6
Mchinji	135	18	117	0	97	100	102	1.0-1.0
Mwanza	102	0	102	0	77	76	78	1.0-1.0
Mzimba	306	5	246	55	207	77	251	2.8-4.6
Neno	90	9	81	0	61	64	65	1.0-1.0
Nkhata Bay	172	11	160	1	122	87	124	1.0-1.5
Nkhotakota	243	0	243	0	164	83	179	2.0-2.6
Ntcheu	197	1	196	0	150	90	148	1.4-2.3
Rumphi	175	18	157	0	112	83	113	1.1-2.1
Salima	253	24	211	18	178	86	192	1.7-2.3
Total	**3,152**	**245**	**2,784**	**123**	**2,144**	**1,272**	**2,279**	

6.3 Locale of Venues and Types of Venues

The venues were often in areas with trading centers. See Figure 17 below. Figure 18 presents the distribution of venues by type. Most venues are bars, and many are bars where sex occurs onsite.

Figure 17 Type of Locale for Venues

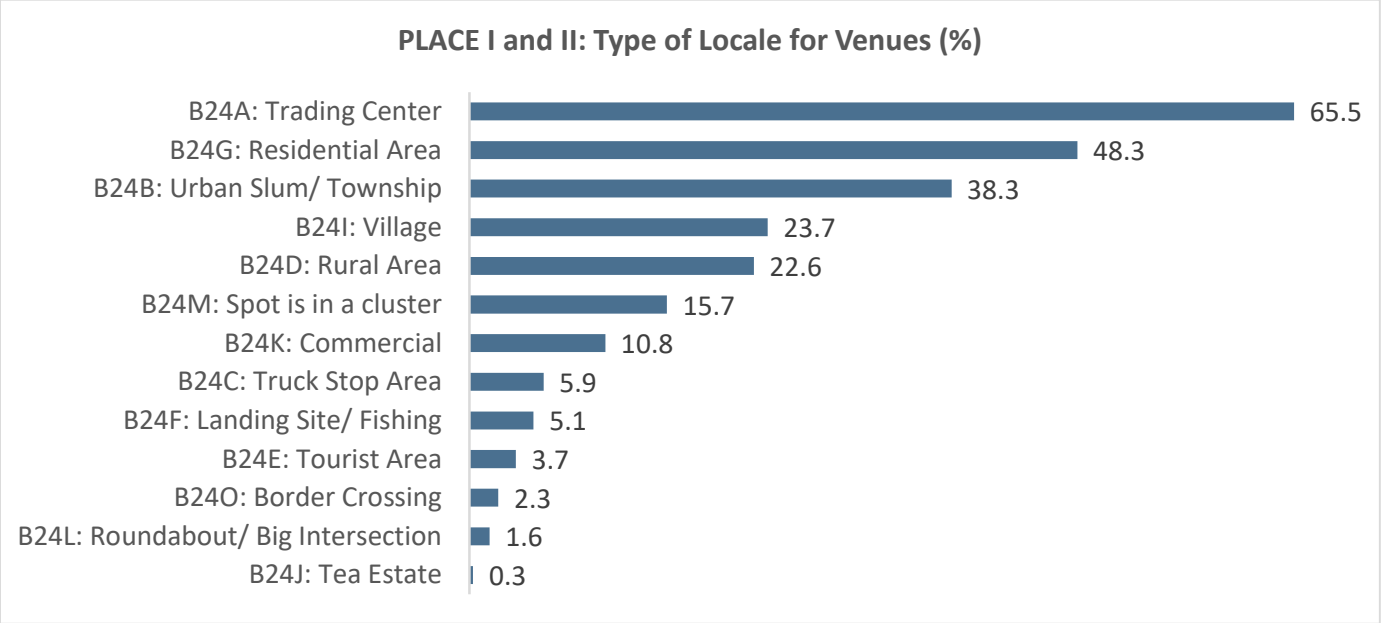


Figure 18 Number of Venues by Type

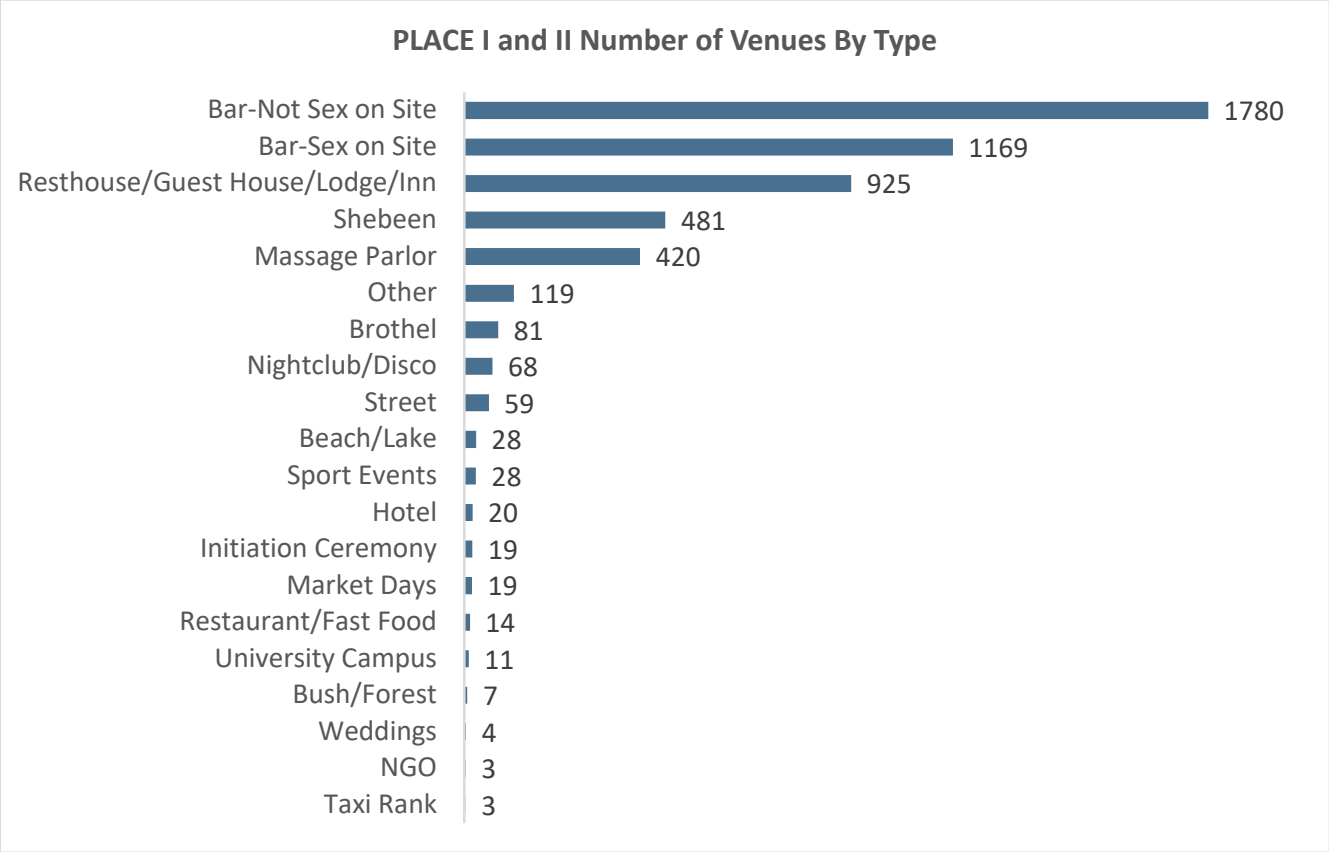
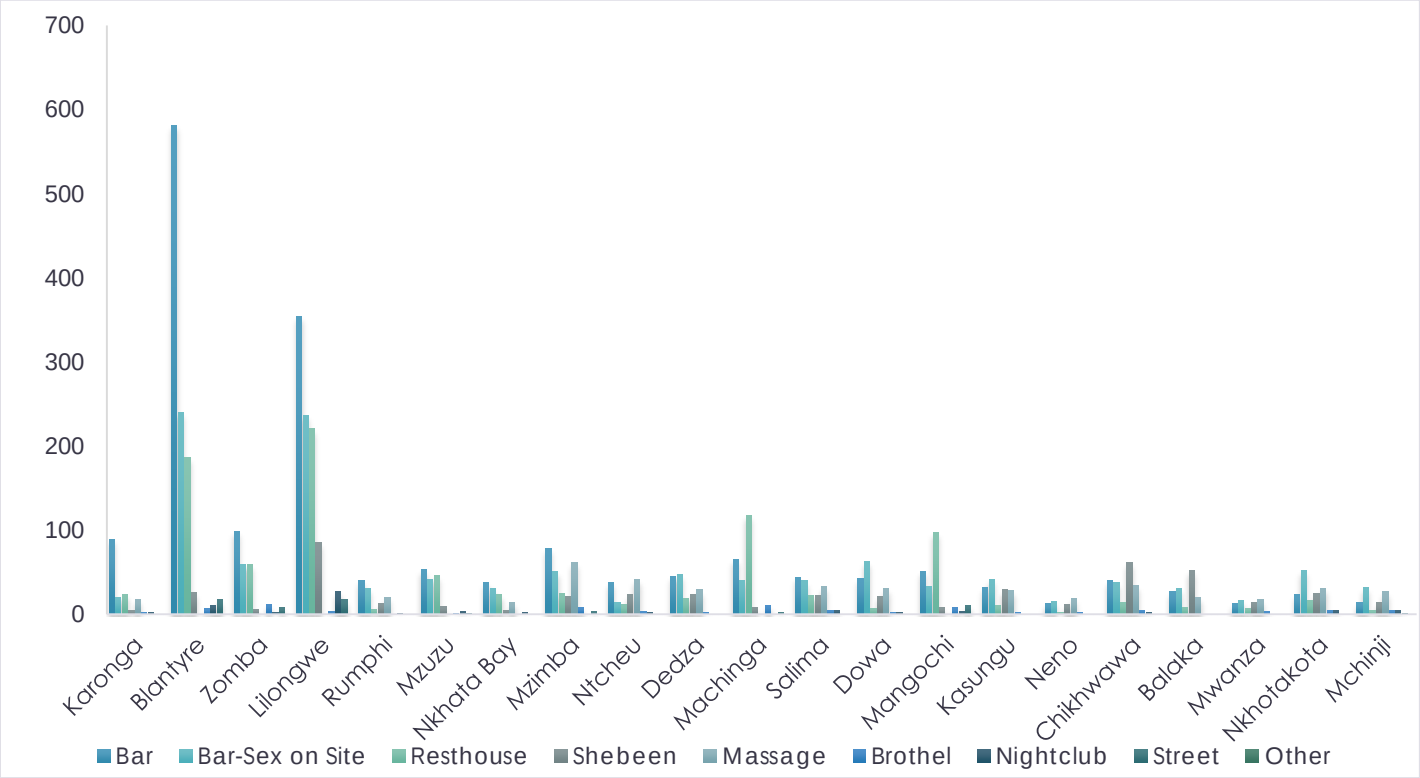


Figure 19 PLACE I and II: Distribution of Venue Types by District



6.4 Characteristics of General Venue Informants

Table 6.2 shows characteristics of the general venue informants. Most were men with an average age of 31.

Table 6.2 PLACE I & II: Characteristics of General Venue Informants

District								
PLACE I								
	Lilongwe	**Mzuzu**	**Blantyre**	**Mangochi**	**Machinga**	**Zomba**	**ALL**	
Number Respondents (N)	703	152	515	148	118	167	**1,803**	
Mean Age Informant	31.1	32.3	30.8	31.5	32.9	31.4	**31.3**	
B29: Sex of Respondent (%)								
Male	78.5	73.7	80.2	60.8	66.1	68.9	**75.4**	
Female	20.1	26.3	19.8	39.2	33.9	30.5	**24.0**	
B30: Do you work here? (%)								
Yes	87.2	82.9	90.1	83.1	79.7	84.4	**86.6**	
No	11.7	16.4	9.7	16.9	20.3	15.0	**12.8**	
PLACE II								

	Balaka	Chikhw-awa	Dedza	Dowa	Kasungu	Mchinji	Mwanza	Neno
Respondents	80	75	84	89	103	100	76	64
Mean Age of Informant	34.7	33.9	30.3	34.2	32.2	33.2	31.9	30.8
B29: Sex of Respondent (%)								
Male	66.3	65.3	76.2	77.5	69.9	74.0	60.5	64.1
Female	33.8	34.7	23.8	22.5	30.1	26.0	39.5	35.9
B30: Do you work here? (%)								
Yes	58.8	64.0	73.8	80.9	78.6	77.0	89.5	79.7
No	40.0	36.0	26.2	19.1	21.4	23.0	10.5	20.3
PLACE II - Continued								
	Nkhata Bay	**Nkhota-kota**	**Ntcheu**	**Salima**	**Karonga**	**Rumphi**	**Mzimba**	**All**
Respondents	87	83	90	86	95	83	77	**1,272**
Mean Age Informant	31.5	32.8	31.9	32.8	33.5	32.5	30.4	**32.5**
B29: Sex of Respondent (%)								
Male	78.2	72.3	68.9	66.3	69.5	71.1	59.7	**69.7**
Female	21.8	27.7	31.1	33.7	30.5	28.9	40.3	**30.3**
B30: Do you work here? (%)								
Yes	74.7	83.1	77.8	84.9	84.2	81.9	76.6	**77.8**
No	24.1	16.9	22.2	15.1	15.8	18.1	23.4	**22.0**

6.5 Characteristics of Venue Patrons According to the General Venue Informants

Table 6.3 presents characteristics of venue patrons, including key populations and other groups of interest by region. Nearly four in five venues were reported to have female sex workers present, and almost one in three were reported to have male sex workers present. The proportion of venues with MSM varies by Region. It was highest in the Central Region where 16% of venues reported MSM on venue and lowest in the Southern Region where only 10% of venues reported MSM. The district with the highest proportion of MSM venues was Karonga in the Northern Region. Over half of venues in all districts were reported to have male clients looking to buy sex. Many venues attract youth patrons, with 22 percent of venues reported to have girls ages 15-17, and 29 percent of venues reported to have boys ages 15-17. Injection drug use at venues was very uncommon, reported only in Blantyre, Lilongwe, and Mzuzu.

Table 6.3 Percentage of Venues with Key Populations and Other Subgroups, As Reported by General Venue Informants Who Agreed to Participate, Percentages are Weighted Based on Sampling Probability

Central Region	Dedza	Dowa	Kasungu	Lilong-we	Mchinji	Nkhota-kota	Ntcheu	Salima	All
Venues Reporting (N)	84	89	103	703	100	83	90	86	**1,338**
Weighted N	179.7	177.5	152.8	993.0	101.7	179.5	148.1	191.5	**2,123.8**
Female Sex Workers (% with)	75.9	83.9	81.2	83.1	84.0	77.3	79.8	79.6	**81.4**
Women Who Inject Drugs (% with)	1.1	4.0	0.0	2.3	1.0	1.1	1.6	1.2	**1.9**
Girls 15-17 (% with)	8.4	21.7	37.5	20.5	27.0	29.2	17.5	29.2	**22.4**
Girls 12-14 (% with)	4.8	5.1	18.3	9.5	7.0	18.3	4.1	17.0	**10.3**
Women Living within 20 Minute Walk (% with)	61.0	47.9	54.1	80.1	45.9	35.4	36.0	46.5	**62.4**
Women from outside the District (% with)	41.6	40.3	45.3	42.5	55.0	35.1	32.1	45.0	**41.9**
Women Who Visit Daily (% with)	46.6	51.3	47.2	64.9	46.9	32.8	31.4	51.1	**53.8**
Transgender People (% with)	1.1	0.0	3.9	3.8	0.0	1.1	1.9	0.0	**2.4**
Men Who Have Sex with Men (% with)	22.8	16.6	21.3	16.5	14.1	11.7	13.4	18.5	**16.8**
Men Who Sell Sex (% with)	15.8	27.1	40.6	35.8	12.0	26.5	24.2	27.1	**30.2**
Men Who Buy Sex (% with)	47.2	59.9	54.3	65.6	68.0	44.2	55.4	57.1	**59.6**
Men Who Inject Drugs (% with)	0.0	2.5	1.0	3.7	0.0	1.1	3.1	1.2	**2.4**
Men Living within a Minute Walk (% with)	60.5	66.8	64.0	89.0	76.9	63.7	68.8	55.3	**75.8**
Men from outside the District (% with)	47.2	63.8	65.9	55.8	67.0	55.4	50.4	58.7	**56.8**
Men Who Visit Daily (% with)	55.4	77.8	75.7	78.0	77.0	61.7	56.2	64.7	**71.7**
Boys 15-17 (% with)	11.5	46.1	45.5	29.7	49.0	38.6	20.0	37.7	**32.4**

Northern Region	Nkhata Bay	Mzuzu	Karonga	Rumphi	Mzimba	ALL
Venues Reporting (N)	87	152	95	83	77	**494**
Weighted N	124.3	162.0	159.9	112.9	251.0	**810.2**
Female Sex Workers (% with)	72.0	82.9	78.9	90.4	77.3	**79.7**
Women Who Inject Drugs (% with)	0.0	1.3	0.8	1.0	0.0	**0.6**
Girls 15-17 (% with)	15.7	21.1	21.8	19.3	12.7	**17.5**
Girls 12-14 (% with)	9.9	3.9	10.1	5.9	5.2	**6.7**
Women Living within 20 Minute Walk (% with)	59.2	80.3	51.2	54.8	20.6	**49.3**
Women from outside the District (% with)	56.0	63.2	50.4	46.3	30.0	**46.9**
Women Who Visit Daily (% with)	45.3	60.5	44.3	51.1	29.8	**44.2**
Transgender People (% with)	0.0	2.0	0.0	0.0	0.0	**0.4**
Men Who Have Sex with Men (% with)	16.8	10.5	23.5	11.6	10.8	**14.3**
Men Who Sell Sex (% with)	14.8	38.8	16.8	12.5	10.2	**18.2**
Men Who Buy Sex (% with)	54.3	68.4	57.0	50.2	56.1	**57.7**
Men Who Inject Drugs (% with)	0.0	0.7	0.0	0.0	1.1	**0.5**
Men Living within a Minute Walk (% with)	69.1	88.2	74.0	77.9	62.6	**73.1**
Men from outside the District (% with)	60.9	79.6	80.7	63.5	61.8	**69.2**
Men Who Visit Daily (% with)	54.4	73.7	81.5	72.9	50.5	**65.0**
Boys 15-17 (% with)	23.5	30.3	31.9	37.4	17.4	**26.6**

Southern Region	Balaka	Chikh-wawa	Mwan-za	Neno	Blanty-re	Mang-ochi	Machi-nga	Zomba	ALL
Venues Reporting (N)	80	75	76	64	515	148	118	167	**1,243**
Weighted N	160.0	197.4	78.3	64.7	1,104.0	221.0	248.0	252.0	**2,325.4**
Female Sex Workers (% with)	54.4	75.0	90.8	81.3	81.0	73.6	78.8	86.2	**78.6**
Women Who Inject Drugs (% with)	0.0	0.0	1.3	0.0	3.1	0.0	0.0	0.0	**1.5**
Girls 15-17 (% with)	18.4	21.3	14.5	25.1	21.4	28.4	21.2	24.0	**22.0**
Girls 12-14 (% with)	9.1	4.9	6.6	12.6	8.2	12.2	9.3	7.8	**8.5**
Women Living within 20 Minute Walk (% with)	32.8	48.2	44.7	51.6	74.8	75.0	71.2	77.2	**67.9**
Women from outside the District (% with)	21.1	39.6	43.4	42.2	35.1	61.5	62.7	46.7	**41.7**
Women Who Visit Daily (% with)	43.0	46.3	36.9	50.0	61.7	53.4	46.6	58.1	**55.2**
Transgender People (% with)	1.1	0.0	0.0	1.6	2.9	0.7	0.0	1.2	**1.7**
Men Who Have Sex with Men (% with)	10.5	7.3	6.6	9.4	12.8	11.5	5.1	9.0	**10.5**
Men Who Sell Sex (% with)	3.2	6.1	26.3	9.4	32.8	31.8	24.6	30.5	**26.4**
Men Who Buy Sex (% with)	32.3	34.8	61.8	56.3	62.3	50.7	61.9	58.7	**56.2**
Men Who Inject Drugs (% with)	0.0	1.2	1.3	0.0	2.7	1.4	0.0	1.8	**1.8**
Men Living within a Minute Walk (% with)	53.3	62.8	69.7	54.5	87.2	82.4	83.1	89.2	**80.6**
Men from outside the District (% with)	29.1	43.3	54.0	57.8	49.5	74.3	75.4	68.9	**55.2**
Men Who Visit Daily (% with)	60.9	68.3	61.9	65.6	80.6	59.5	51.7	67.1	**70.6**
Boys 15-17 (% with)	24.6	15.9	19.8	28.1	27.8	29.7	19.5	33.5	**26.2**

The figures below show the percent of venues with key populations by region. Very few venue informants reported the presence of transgender persons or men who inject drugs.

Figure 20 Central Region: Percent of Venues with Key Populations

	% With				
	Transgender People	Men Who Inject Drugs	Men Who Have Sex With Men	Men Who Buy Sex	Female Sex Workers
Dedza	1.1	0.0	22.8	47.2	75.9
Dowa	0.0	2.5	16.6	59.9	83.9
Kasungu	3.9	1.0	21.3	54.3	81.2
Lilongwe	3.8	3.7	16.5	65.6	83.1
Mchinji	0.0	0.0	14.1	68.0	84.0
Nkhotakota	1.1	1.1	11.7	44.2	77.3
Ntcheu	1.9	3.1	13.4	55.4	79.8
Salima	0.0	1.2	18.5	57.1	79.6
All	**2.4**	**2.4**	**16.8**	**59.6**	**81.4**

Figure 21 Northern Region: Percent of Venues with Key Populations

	% With				
	Transgender People	Men Who Inject Drugs	Men Who Have Sex With Men	Men Who Buy Sex	Female Sex Workers
Nkata Bay	0.0	0.0	16.8	54.3	72.0
Mzuzu	2.0	0.7	10.5	68.4	82.9
Karonga	0.0	0.0	23.5	57.0	78.9
Rumphi	0.0	0.0	11.6	50.2	90.4
Mzimba	0.0	1.1	10.8	56.1	77.3
All	**0.4**	**0.5**	**14.3**	**57.7**	**79.7**

Figure 22 Southern Region: Percent of Venues with Key Populations

	% With				
	Transgender People	Men Who Inject Drugs	Men Who Have Sex With Men	Men Who Buy Sex	Female Sex Workers
Balaka	1.1	0.0	10.5	32.3	54.4
Chikhwawa	0.0	1.2	7.3	34.8	75.0
Mwanza	0.0	1.3	6.6	61.8	90.8
Neno	1.6	0.0	9.4	56.3	81.3
Blantyre	2.9	2.7	12.8	62.3	81.0
Mangochi	0.7	1.4	11.5	50.7	73.6
Machinga	0.0	0.0	5.1	61.9	78.8
Zomba	1.2	1.8	9.0	58.7	86.2

6.6 Indicators of Venue Facilitation of Sex Work

Many venues provided support for on-venue sex work. For example, many sex workers live onsite. Sex also often occurs onsite. Frequently a person is available to help customers find a sex partner. Sometimes there is a list of women available for sex. The table below shows the percentage of venues with factors facilitating sex work.

Table 6.4 Sex Work Indicators

Central Region	Dedza	Dowa	Kasungu	Lilong-we	Mchinji	Nkhota-kota	Ntcheu	Salima	All
Number of Venues Reporting (N)	84	89	103	703	100	83	90	86	**1,338**
Weighted N of Venues	179.7	177.5	152.8	993.0	101.7	179.5	148.1	191.5	**2,123.8**
Sex Workers Living Onsite (% with)	26.0	29.3	34.5	28.6	36.2	36.5	18.4	25.5	**28.9**
Sex Onsite (% with)	50.4	61.5	54.7	50.4	60.3	65.5	48.5	61.4	**54.2**
Someone Who Helps Find Sex Partners for People (% with)	13.5	17.6	21.1	25.2	18.1	15.1	7.7	23.1	**20.7**
List Onsite of Available Sex Partners (% with)	11.3	16.1	21.1	13.8	18.1	12.5	9.7	15.8	**14.3**
Female Staff who Meet Sex Partners (% with)	24.2	19.2	6.8	22.0	19.0	15.1	10.3	37.1	**20.7**
Male Staff who Meet Sex Partners Onsite (% with)	16.3	8.1	15.5	19.8	18.1	13.7	10.3	28.9	**17.8**

Northern Region	Nkhata Bay	Mzuzu	Karonga	Rumphi	Mzimba	All
Number of Venues Reporting (N)	87	152	95	83	77	**494**
Weighted N of Venues	124.3	162.0	159.9	112.9	251.0	**810.2**
Sex Workers Living Onsite (% with)	16.0	29.8	14.1	21.5	17.9	**19.7**
Sex Onsite (% with)	58.8	57.9	39.2	49.6	47.9	**50.1**

Someone Who Helps Find Sex Partners for People (% with)	11.1	19.1	25.2	13.5	8.6	**15.0**
Female Staff who Meet Sex Partners Onsite (% with)	21.8	27.0	20.1	9.7	4.5	**15.5**
Male Staff who Meet Sex Partners Onsite (% with)	18.1	15.1	9.2	2.0	7.5	**10.2**

Southern Region	**Balaka**	**Chikhw-awa**	**Mwan-za**	**Neno**	**Blantyre**	**Mang-ochi**	**Mach-inga**	**Zomba**	**All**
Number of Venues Reporting (N)	80	75	76	64	515	148	118	167	**1,243**
Weighted N	160.0	197.4	78.3	64.7	1,104.0	221.0	248.0	252.0	**2,325.4**
% with Sex Workers Living Onsite	9.5	14.2	30.2	23.6	22.4	28.4	27.4	30.1	**23.1**
% with Sex Onsite	39.9	43.9	55.2	58.1	42.3	59.5	62.7	56.3	**48.5**
% with Someone Who Helps Find Sex Partners for People	13.2	18.3	17.1	12.5	18.3	18.2	17.8	20.4	**17.9**
% with a List Onsite of Available Sex Partners	7.2	9.8	15.8	9.4	13.0	18.2	11.0	19.8	**13.3**
% with Female Staff who Meet Sex Partners Onsite	8.2	14.6	17.1	17.2	22.9	15.5	20.3	19.8	**19.5**
% with Male Staff who Meet Sex Partners Onsite	8.2	14.6	25.0	9.4	14.4	8.8	9.3	11.4	**12.8**

6.7 Busiest Days and Times

Busiest days and times at venues in PLACE I districts are given in Table 6.7. In this table, mean scores are reported for each day of the week—1 is most busy, 7 is least busy. For example, Saturday is the busiest day at most venues in Lilongwe. Saturday in Lilongwe has a score of 1.8 on a scale from least busy (7) to most busy (1). The busiest time period at most venues is from 5 p.m. to 8 p.m.

Table 6.5 PLACE I Busiest Days and Times, As Reported by General Venue Informants (N=1803)

	Lilongwe	Mzuzu	Blantyre	Mangochi	Machinga	Zomba	All
Venues Reporting (N)	703	152	515	148	118	167	**1,803**
Mean Score							
Saturday	1.8	2.0	1.8	2.5	2.5	2.5	**2.0**
Friday	2.3	2.4	2.3	2.7	2.8	2.2	**2.4**
Sunday	2.7	3.1	2.6	3.5	3.7	3.6	**2.9**
Thursday	4.3	4.2	4.3	4.4	4.2	4.2	**4.3**
Wednesday	4.6	4.7	4.8	4.3	4.0	4.3	**4.6**
Tuesday	5.5	5.5	5.7	5.0	4.6	5.1	**5.4**
Monday	6.2	6.0	6.4	5.3	5.8	6.0	**6.1**
Busiest Time on the Busiest Day							
11 a.m.-2 p.m.	8.8	3.9	4.5	4.7	5.9	5.4	**6.3**
2 p.m.-5 p.m.	20.6	15.1	17.5	18.9	18.6	13.2	**18.3**
5 p.m.-8 p.m.	39.7	37.5	45.0	43.2	56.8	44.9	**42.9**
8 p.m.-11 p.m.	25.7	40.1	30.1	27.7	16.9	34.1	**28.6**
11 p.m.-2 a.m.	3.4	2.0	2.3	0.7	0.8	1.2	**2.4**
2 a.m.-5 a.m.	0.0	0.7	0.0	0.0	0.0	0.0	**0.1**
Does Not Know	0.9	0.0	0.6	4.7	0.8	0.0	**0.9**

6.8 Availability of HIV Prevention Outreach at Sites

Interviewers asked venue informants about prevention services available on site. Of the venues, 22 percent had some type of HIV/AIDS prevention service available within the past six months. Male condoms for sale and free distribution of condoms were the two most common prevention services at venues. HIV testing was uncommon; only 10 percent of venues had ever had people tested on-venue for HIV. At 43 percent of venues condoms were available, either free or to purchase, at the time of the venue visit.

Figure 23 Services Available for PLACE I Districts as of 2016

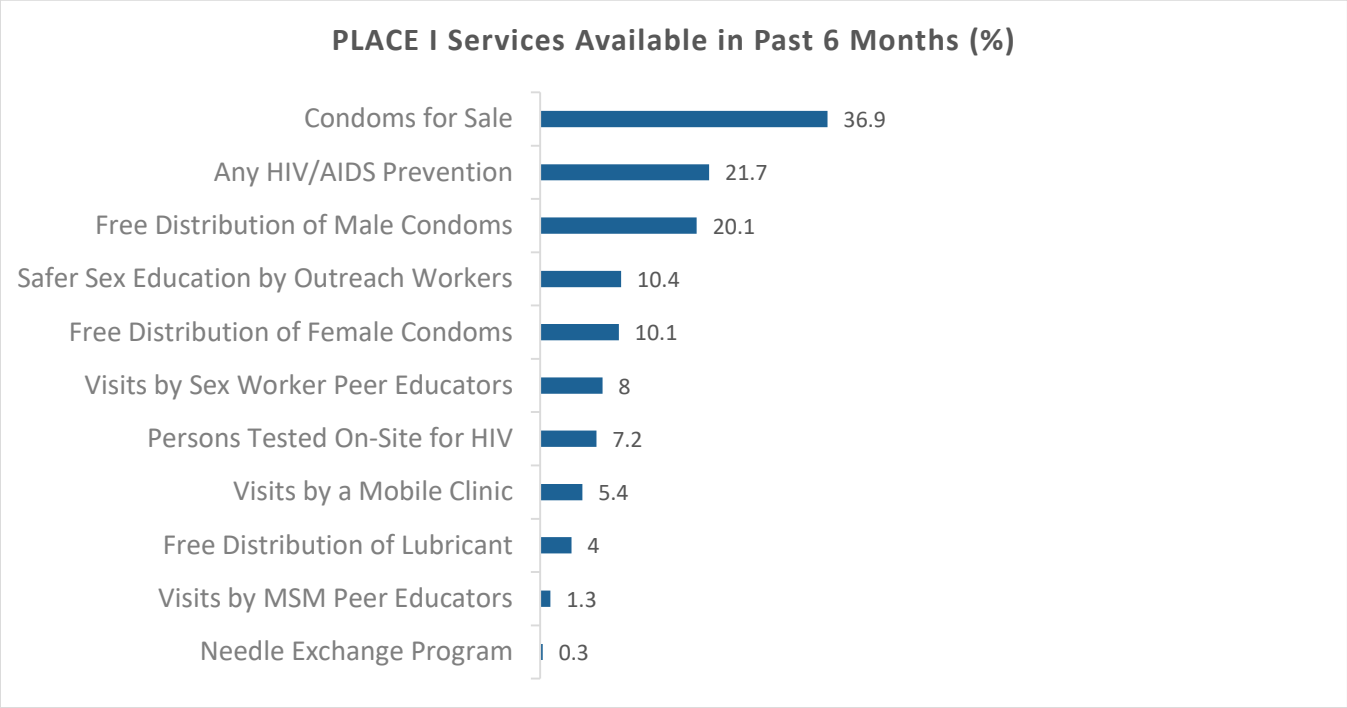
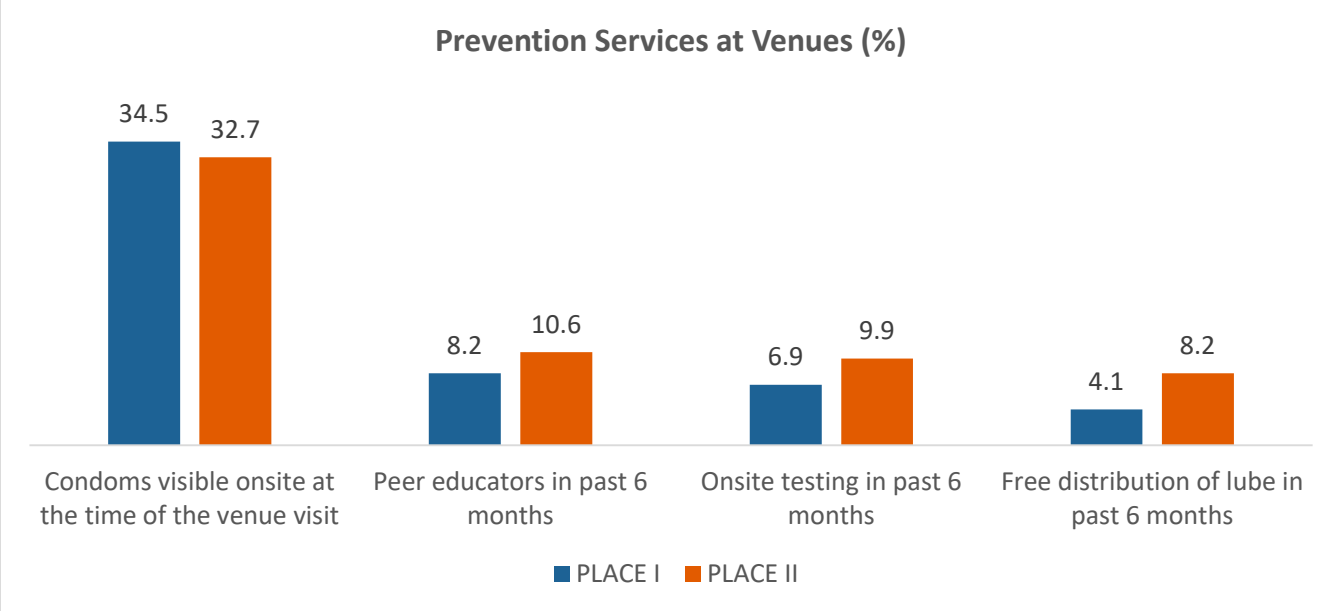


Figure 24 Comparison of PLACE I and PLACE II Districts: Availability of Prevention Services



Prevention service availability was similar for PLACE I districts in 2016 as in PLACE II districts in 2017. Condoms were visible at about a third of the venues. Only about 10% had peer education at the venues, according to the general venue informant. The venue informant may not have known of the peer outreach to the venue.

Although about a third of the venues had condoms visible at the time of the venue visit, the percentage varied by district, with the highest in Mzuzu and the lowest in Balaka. The percentage of sites with peer education also varied by district. See Figure 26.

Figure 25 Condom Visibility at Venues

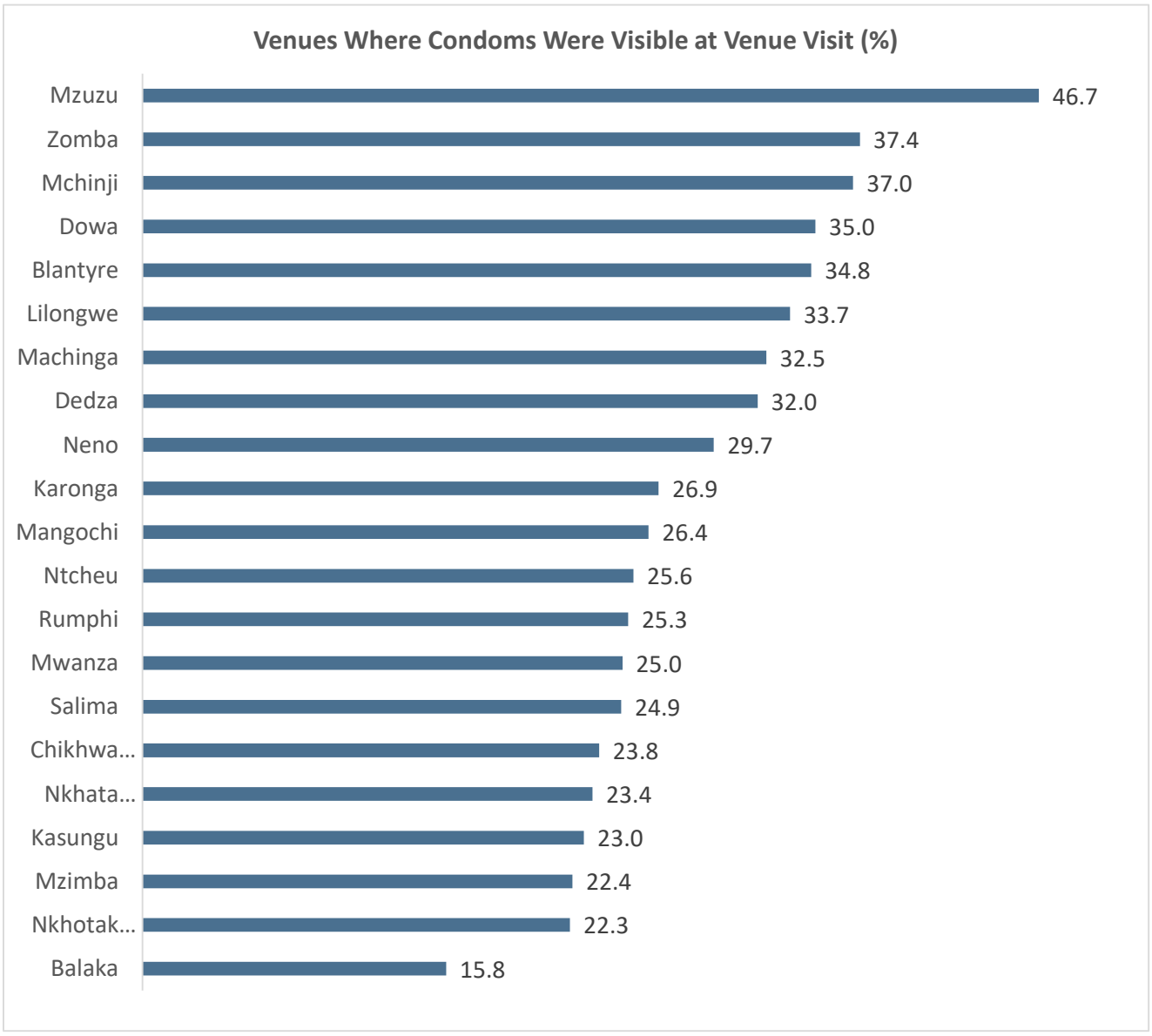
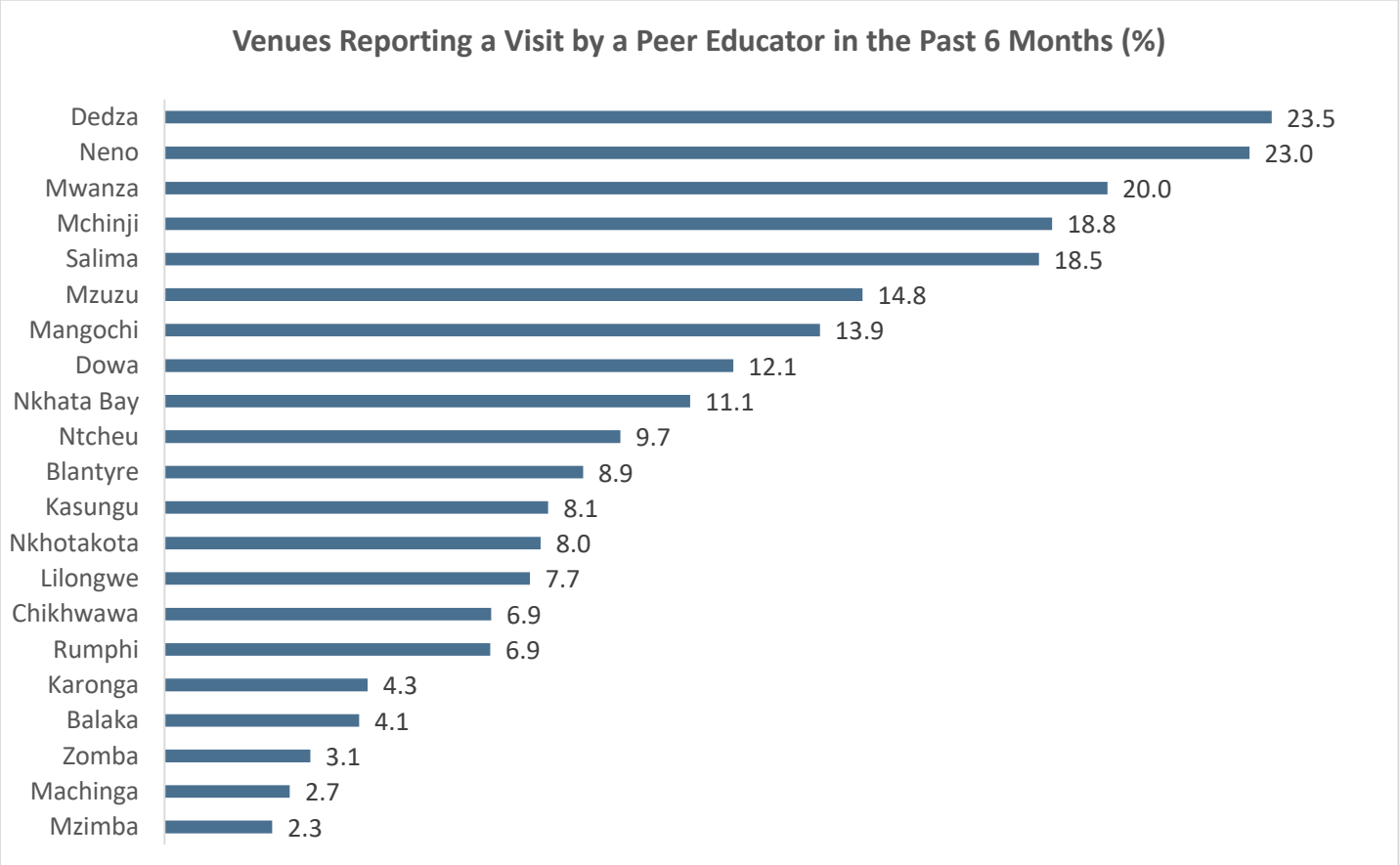


Figure 26 Peer Education at Venues



The table below provides more specific information on when prevention services were most recently provided at the venue for PLACE I districts.

Table 6.6 PLACE I HIV Prevention at Venues, As Reported by General Venue Informants Who Agreed to Participate, PLACE I Districts Data Collected in mid-2016

	Lilongwe	Mzuzu	Blantyre	Mangochi	Machinga	Zomba	All
Venues Reporting (N)	703	152	515	148	118	167	**1,803**
B55A: Any HIV/AIDS prevention?							
< 6 Months Ago	22.3	23.0	21.7	24.3	10.2	24.0	**21.7**
>= 6 Months Ago	4.6	6.6	6.0	5.4	5.1	6.0	**5.4**
Never	68.6	65.8	69.3	64.9	79.7	64.7	**68.6**
Do Not Know	3.3	3.9	2.7	5.4	4.2	4.2	**3.5**
Missing	1.1	0.7	0.2	0.0	0.8	0.6	**0.7**
B55B: Free distribution of male condoms?							
< 6 Months Ago	18.9	26.3	20.0	29.7	5.9	21.0	**20.1**
>= 6 Months Ago	3.8	8.6	4.9	2.7	5.9	9.0	**5.0**

Never	73.3	61.8	72.6	64.2	83.1	67.1	**71.4**
Do Not Know	2.8	2.6	2.3	3.4	4.2	1.8	**2.7**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B55C: Free distribution of female condoms?							
< 6 Months Ago	10.5	13.2	9.3	16.2	4.2	7.2	**10.1**
>= 6 Months Ago	2.0	4.6	1.9	0.7	4.2	4.2	**2.4**
Never	83.2	75.0	84.9	78.4	83.9	85.0	**82.8**
Do Not Know	3.0	6.6	3.5	4.7	6.8	2.4	**3.8**
Missing	1.1	0.7	0.4	0.0	0.8	0.6	**0.7**
B55D: Free distribution of lube?							
< 6 Months Ago	2.6	7.2	4.3	13.5	0.0	0.6	**4.0**
>= 6 Months Ago	0.6	2.0	0.4	0.7	0.8	1.8	**0.8**
Never	90.8	80.9	90.9	82.4	93.2	92.8	**89.6**
Do Not Know	5.0	9.2	4.3	3.4	5.1	3.6	**4.9**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B55E: Condoms for sale at spot?							
< 6 Months Ago	40.4	41.4	38.6	25.0	23.7	32.9	**36.9**
>= 6 Months Ago	3.7	2.6	3.1	1.4	2.5	9.6	**3.7**
Never	52.6	54.6	56.5	73.0	67.8	55.7	**56.8**
Do Not Know	2.0	0.7	1.6	0.7	5.1	0.6	**1.7**
Missing	1.1	0.7	0.2	0.0	0.8	0.6	**0.7**
B55F: Persons tested on-venue for HIV?							
< 6 Months Ago	9.5	14.5	5.4	4.1	1.7	2.4	**7.2**
>= 6 Months Ago	4.0	2.6	1.4	1.4	3.4	2.4	**2.7**
Never	83.1	78.9	90.3	89.2	89.8	91.0	**86.5**
Do Not Know	2.3	3.3	2.7	5.4	4.2	3.0	**2.9**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B55G: Safer sex education by outreach workers?							
< 6 Months Ago	10.5	15.1	10.5	14.2	4.2	6.6	**10.4**
>= 6 Months Ago	2.3	2.0	1.2	0.0	1.7	1.8	**1.7**
Never	83.2	77.0	84.9	82.4	89.0	88.6	**84.0**
Do Not Know	2.8	5.3	3.3	3.4	4.2	1.8	**3.2**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B55H: Visits by Sex Worker Peer Educators?							
< 6 Months Ago	7.4	13.8	8.5	13.5	2.5	3.0	**8.0**
>= 6 Months Ago	2.0	2.6	1.0	0.7	1.7	0.0	**1.4**
Never	86.2	77.0	86.8	83.1	91.5	94.0	**86.4**
Do Not Know	3.0	5.9	3.5	2.7	3.4	1.8	**3.3**
Missing	1.3	0.7	0.2	0.0	0.8	0.6	**0.7**
B55I: Visits by MSM Peer Educators?							
<6 Months Ago	1.1	2.6	1.0	4.1	0.0	0.0	**1.3**
>= 6 Months Ago	0.1	0.0	0.0	0.0	0.0	0.0	**0.1**
Never	93.7	89.5	95.5	92.6	95.8	96.4	**94.2**
Do Not Know	3.8	7.2	3.3	3.4	3.4	2.4	**3.8**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B55J: Visits by a mobile clinic?							
<6 Months Ago	7.0	7.2	4.9	5.4	1.7	1.2	**5.4**
>= 6 Months Ago	2.3	0.7	0.6	0.7	0.0	0.0	**1.2**
Never	86.6	86.2	92.0	91.2	94.1	95.8	**89.9**
Do Not Know	3.0	4.6	2.3	2.7	3.4	1.8	**2.8**
Missing	1.0	1.3	0.2	0.0	0.8	0.6	**0.7**

B55K: Needle exchange program?							
< 6 Months Ago	0.4	0.0	0.2	1.4	0.0	0.0	**0.3**
>= 6 Months Ago	0.6	0.0	0.0	0.0	0.0	0.0	**0.2**
Never	94.6	94.7	96.9	95.9	95.8	97.0	**95.7**
Do Not Know	3.3	4.6	2.7	2.7	3.4	1.8	**3.1**
Missing	1.0	0.7	0.2	0.0	0.8	0.6	**0.6**
B56: In the past six months how often have male condoms been available here? By available, I mean they are free or can be purchased here.							
Always	45.9	52.0	45.4	29.7	33.1	42.5	**43.8**
Sometimes	16.6	18.4	19.4	15.5	19.5	18.6	**17.9**
Never	35.6	28.9	33.8	53.4	45.8	37.7	**36.8**
Do Not Know	0.9	0.0	1.0	1.4	0.8	0.0	**0.8**
Missing	0.9	0.7	0.4	0.0	0.8	0.6	**0.6**
B58: In the past six months, how often has sexual lubricant been available here?							
Always	0.9	1.3	1.9	5.4	0.0	0.6	**1.5**
Sometimes	1.8	2.6	1.9	4.7	0.8	1.2	**2.1**
Never	93.7	92.1	94.0	87.8	98.3	96.4	**93.7**
Do Not Know	2.6	3.3	1.9	2.0	0.0	0.6	**2.1**
Missing	0.9	0.7	0.2	0.0	0.8	0.6	**0.6**
B59: Can you show me a condom that is available for free or for someone to buy?							
Yes	42.7	51.3	46.2	30.4	35.6	46.1	**43.3**
No	57.2	48.7	53.8	69.6	64.4	53.3	**56.6**

Table 6.7 provides the same information for PLACE II districts.

Table 6.7 PLACE II HIV Prevention at Venues, As Reported by General Venue Informants Who Agreed to Participate, PLACE I Districts Data Collected in mid-2016, Weighted Percentages

PLACE II Central Region	Dedza	Dowa	Kasungu	Mchinji	Nkhotakota	Ntcheu	Salima	All
Venues Reporting (N)	84	89	103	100	83	90	86	**635**
B55A: Any HIV/AIDS prevention? %								
<= 6 months ago	33.3	18.0	17.5	30.0	16.9	21.1	25.6	**23.1**
> 6 months ago	6.0	10.1	3.9	10.0	1.2	4.4	8.1	**6.3**
Never	51.2	69.7	75.7	56.0	79.5	71.1	59.3	**66.1**
Does not know	9.5	2.2	2.9	4.0	2.4	3.3	7.0	**4.4**
Free distribution of male condoms? %								
<= 6 months ago	34.5	20.2	26.2	28.0	25.3	28.9	23.3	**26.6**
>6 months ago	2.4	6.7	3.9	7.0	1.2	5.6	10.5	**5.4**
Never	52.4	71.9	68.0	61.0	72.3	65.6	60.5	**64.6**
Does not know	10.7	1.1	1.9	4.0	1.2	0.0	5.8	**3.5**
Free distribution of female condoms? %								
<= 6 months ago	15.5	6.7	16.5	17.0	7.2	10.0	15.1	**12.8**
>6 months ago	2.4	5.6	0.0	4.0	1.2	0.0	9.3	**3.1**
Never	69.0	85.4	81.6	75.0	89.2	88.9	69.8	**79.8**
Does not know	13.1	2.2	1.9	4.0	2.4	1.1	5.8	**4.3**
Free distribution of lube? %								
<= 6 months ago	10.7	7.9	10.7	11.0	8.4	13.3	5.8	**9.8**
>6 months ago	0.0	1.1	1.9	2.0	2.4	0.0	2.3	**1.4**

Never	71.4	85.4	81.6	79.0	88.0	85.6	81.4	**81.7**
Does not know	17.9	5.6	5.8	8.0	1.2	1.1	10.5	**7.1**
Condoms for sale at spot? %								
<= 6 months ago	40.5	16.9	30.1	23.0	22.9	40.0	27.9	**28.7**
>6 months ago	2.4	12.4	1.0	9.0	3.6	1.1	8.1	**5.4**
Never	51.2	70.8	65.0	66.0	72.3	58.9	59.3	**63.5**
Does not know	6.0	0.0	3.9	2.0	1.2	0.0	4.7	**2.5**
Persons tested on-venue for HIV? %								
<= 6 months ago	19.0	5.6	7.8	14.0	7.2	7.8	17.4	**11.2**
>6 months ago	2.4	3.4	1.9	2.0	3.6	0.0	4.7	**2.5**
Never	69.0	89.9	85.4	82.0	88.0	91.1	68.6	**82.2**
Does not know	9.5	1.1	4.9	2.0	1.2	1.1	9.3	**4.1**
Safer sex education by outreach workers? %								
<= 6 months ago	26.2	11.2	11.7	16.0	6.0	11.1	23.3	**15.0**
>6 months ago	3.6	5.6	1.0	2.0	2.4	3.3	7.0	**3.5**
Never	59.5	80.9	85.4	78.0	91.6	85.6	65.1	**78.3**
Does not know	10.7	2.2	1.9	4.0	0.0	0.0	4.7	**3.3**
Visits by Sex Worker Peer Educators? %								
<= 6 months ago	21.4	12.4	7.8	18.0	8.4	11.1	17.4	**13.7**
>6 months ago	3.6	2.2	1.9	1.0	2.4	4.4	7.0	**3.1**
Never	64.3	82.0	84.5	77.0	89.2	84.4	70.9	**79.1**
Does not know	10.7	3.4	5.8	4.0	0.0	0.0	3.5	**3.9**
Missing	0.0	0.0	0.0	0.0	0.0	0.0	1.2	**0.2**
Visits by MSM Peer Educators? %								
<= 6 months ago	2.4	0.0	0.0	1.0	0.0	1.1	0.0	**0.6**
>6 months ago	0.0	0.0	0.0	0.0	0.0	0.0	2.3	**0.3**
Never	82.1	96.6	95.1	95.0	97.6	96.7	87.2	**93.1**
Does not know	15.5	3.4	4.9	4.0	2.4	2.2	10.5	**6.0**
Visits by a mobile clinic? %								
<= 6 months ago	7.1	7.9	8.7	7.0	8.4	7.8	10.5	**8.2**
>6 months ago	1.2	2.2	1.0	1.0	3.6	1.1	7.0	**2.4**
Never	78.6	86.5	88.3	90.0	85.5	91.1	77.9	**85.7**
Does not know	13.1	3.4	1.9	2.0	1.2	0.0	4.7	**3.6**
Missing	0.0	0.0	0.0	0.0	1.2	0.0	0.0	**0.2**
Needle exchange program?								
<= 6 months ago	0.0	1.1	0.0	0.0	0.0	1.1	1.2	**0.5**
>6 months ago	0.0	1.1	1.0	0.0	0.0	0.0	0.0	**0.3**
Never	88.1	95.5	97.1	99.0	100.0	98.9	95.3	**96.4**
Does not know	11.9	2.2	1.9	1.0	0.0	0.0	3.5	**2.8**
How often condoms available here past 6 months? %								
Always	34.5	42.7	35.0	43.0	31.3	40.0	37.2	**37.8**
Sometimes	22.6	12.4	11.7	15.0	19.3	14.4	19.8	**16.2**
Never	36.9	44.9	52.4	40.0	48.2	43.3	41.9	**44.1**
Do Not Know	4.8	0.0	1.0	2.0	1.2	2.2	1.2	**1.7**
Missing	1.2	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
How often lube available here past 6 months? %								
Always	1.2	2.2	0.0	2.0	2.4	1.1	3.5	**1.7**
Sometimes	4.8	3.4	2.9	7.0	3.6	3.3	1.2	**3.8**
Never	84.5	91.0	94.2	90.0	94.0	94.4	93.0	**91.7**
Do Not Know	7.1	3.4	2.9	1.0	0.0	1.1	2.3	**2.5**
Missing	2.4	0.0	0.0	0.0	0.0	0.0	0.0	**0.3**

Northern & Southern Regions	Balaka	Chikhwawa	Mwanza	Neno	Nkhata Bay	Karonga	Rumphi	Mzimba	ALL
Venues Reporting (N)	80	75	76	64	87	95	83	77	**637**
B55A: Any HIV/AIDS prevention? %									
<= 6 months ago	8.8	20.0	35.5	34.4	16.1	15.8	18.1	9.1	**19.2**
>6 months ago	1.3	6.7	3.9	7.8	8.0	10.5	8.4	6.5	**6.8**
Never	83.8	65.3	57.9	56.3	71.3	70.5	71.1	84.4	**70.5**
Does not know	5.0	8.0	2.6	1.6	4.6	3.2	2.4	0.0	**3.5**
Missing	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
Free distribution of male condoms? %									
<= 6 months ago	10.0	20.0	43.4	34.4	21.8	16.8	28.9	14.3	**23.2**
>6 months ago	3.8	9.3	6.6	12.5	5.7	9.5	13.3	1.3	**7.7**
Never	83.8	68.0	50.0	50.0	69.0	69.5	57.8	83.1	**66.9**
Does not know	2.5	2.7	0.0	3.1	3.4	4.2	0.0	1.3	**2.2**
Free distribution of female condoms? %									
<= 6 months ago	3.8	8.0	31.6	17.2	4.6	8.4	10.8	6.5	**11.0**
>6 months ago	0.0	6.7	2.6	3.1	2.3	7.4	3.6	0.0	**3.3**
Never	91.3	78.7	65.8	75.0	86.2	78.9	84.3	92.2	**81.8**
Does not know	3.8	6.7	0.0	4.7	6.9	5.3	1.2	1.3	**3.8**
Missing	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
Free distribution of lube? %									
<= 6 months ago	2.5	5.3	30.3	17.2	2.3	2.1	4.8	5.2	**8.2**
>6 months ago	0.0	1.3	2.6	3.1	1.1	0.0	0.0	0.0	**0.9**
Never	91.3	85.3	65.8	73.4	90.8	89.5	95.2	92.2	**86.0**
Does not know	6.3	8.0	1.3	6.3	5.7	8.4	0.0	2.6	**4.9**
Condoms for sale at spot? %									
<= 6 months ago	15.0	17.3	35.5	18.8	18.4	17.9	32.5	28.6	**22.9**
>6 months ago	2.5	5.3	0.0	7.8	2.3	6.3	7.2	1.3	**4.1**
Never	81.3	74.7	64.5	71.9	73.6	75.8	57.8	70.1	**71.3**
Does not know	1.3	2.7	0.0	1.6	5.7	0.0	2.4	0.0	**1.7**
Persons tested on-venue for HIV? %									
<= 6 months ago	3.8	13.3	27.6	14.1	6.9	7.4	3.6	3.9	**9.7**
>6 months ago	1.3	6.7	2.6	4.7	4.6	4.2	1.2	1.3	**3.3**
Never	91.3	77.3	69.7	81.3	83.9	86.3	92.8	94.8	**84.9**
Does not know	3.8	2.7	0.0	0.0	4.6	2.1	2.4	0.0	**2.0**
Safer sex education by outreach workers? %									
<= 6 months ago	3.8	8.0	21.1	18.8	10.3	5.3	8.4	5.2	**9.7**
>6 months ago	5.0	4.0	1.3	3.1	4.6	5.3	1.2	1.3	**3.3**
Never	88.8	85.3	77.6	76.6	79.3	87.4	89.2	90.9	**84.6**
Does not know	2.5	2.7	0.0	1.6	5.7	2.1	1.2	2.6	**2.4**
Visits by Sex Worker Peer Educators? %									
<= 6 months ago	3.8	6.7	19.7	21.9	10.3	5.3	7.2	2.6	**9.3**
>6 months ago	1.3	0.0	0.0	0.0	4.6	4.2	0.0	1.3	**1.6**
Never	92.5	90.7	78.9	73.4	80.5	87.4	91.6	94.8	**86.5**
Does not know	2.5	2.7	1.3	4.7	4.6	3.2	1.2	1.3	**2.7**
Visits by MSM Peer Educators? %									
<= 6 months ago	1.3	1.3	1.3	0.0	4.6	0.0	0.0	0.0	**1.1**
>6 months ago	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	**0.2**
Never	95.0	96.0	94.7	95.3	89.7	96.8	98.8	98.7	**95.6**
Does not know	3.8	2.7	3.9	4.7	4.6	3.2	1.2	1.3	**3.1**

Northern & Southern Regions	Balaka	Chikhwawa	Mwanza	Neno	Nkhata Bay	Karonga	Rumphi	Mzimba	ALL
Visits by a mobile clinic? %									
<= 6 months ago	3.8	12.0	13.2	12.5	3.4	7.4	3.6	3.9	**7.2**
>6 months ago	1.3	1.3	0.0	0.0	3.4	4.2	0.0	1.3	**1.6**
Never	91.3	82.7	85.5	84.4	88.5	85.3	95.2	92.2	**88.2**
Does not know	2.5	4.0	1.3	3.1	4.6	3.2	1.2	2.6	**2.8**
Missing	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
Needle exchange program?									
Always	0.0	0.0	0.0	1.6	0.0	0.0	1.2	0.0	**0.3**
Sometimes	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0.2**
Never	97.5	96.0	100.0	95.3	95.4	98.9	97.6	97.4	**97.3**
Do Not Know	1.3	4.0	0.0	3.1	4.6	1.1	1.2	2.6	**2.2**
How often condoms available here past 6 months? %									
Always	13.8	25.3	42.1	25.0	27.6	29.5	34.9	27.3	**28.3**
Sometimes	21.3	10.7	22.4	23.4	13.8	14.7	26.5	18.2	**18.7**
Never	63.8	62.7	35.5	51.6	55.2	55.8	37.3	53.2	**52.0**
Do Not Know	1.3	1.3	0.0	0.0	3.4	0.0	1.2	1.3	**1.1**
How often lube available here past 6 months? %									
Always	0.0	1.3	9.2	6.3	1.1	0.0	0.0	0.0	**2.0**
Sometimes	2.5	0.0	11.8	10.9	1.1	3.2	0.0	1.3	**3.6**
Never	93.8	97.3	78.9	82.8	93.1	95.8	98.8	94.8	**92.3**
Do Not Know	3.8	1.3	0.0	0.0	4.6	1.1	1.2	3.9	**2.0**

6.9 Prevention Coverage Maps

Overall, the maps illustrate that more outreach is needed at these venues. The maps that follow are PLACE I districts. The maps for PLACE II districts are included in the district summaries (see Appendix 5). Outreach has improved in PLACE I districts since PLACE was implemented.

Figure 27 Lilongwe map

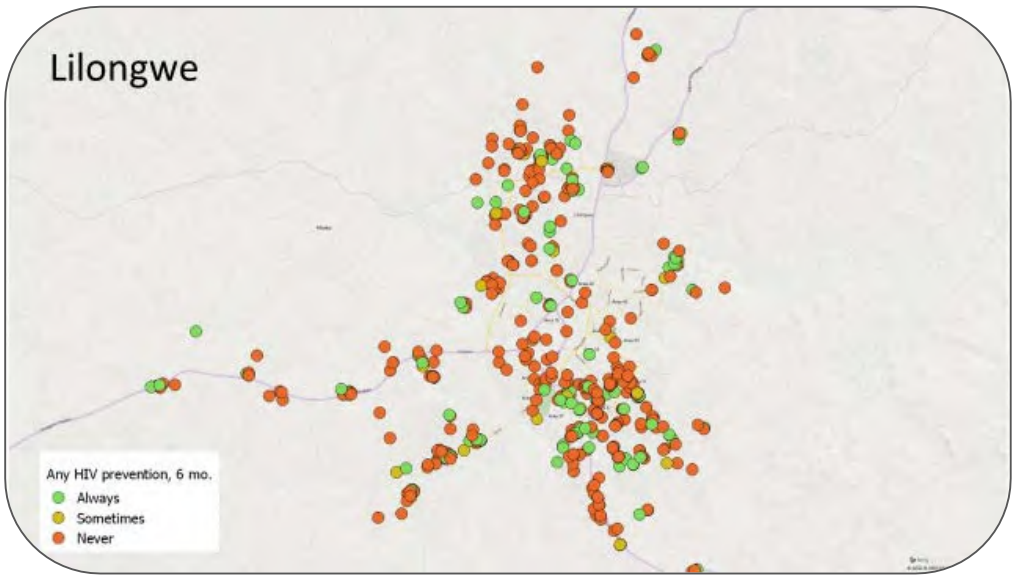


Figure 28 Blantyre Map

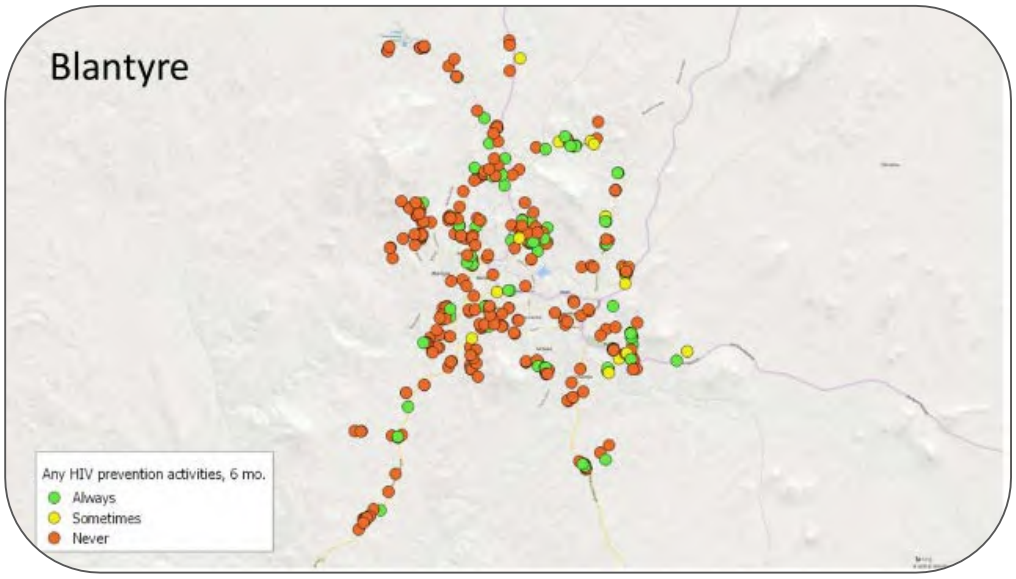


Figure 29 Machinga Map

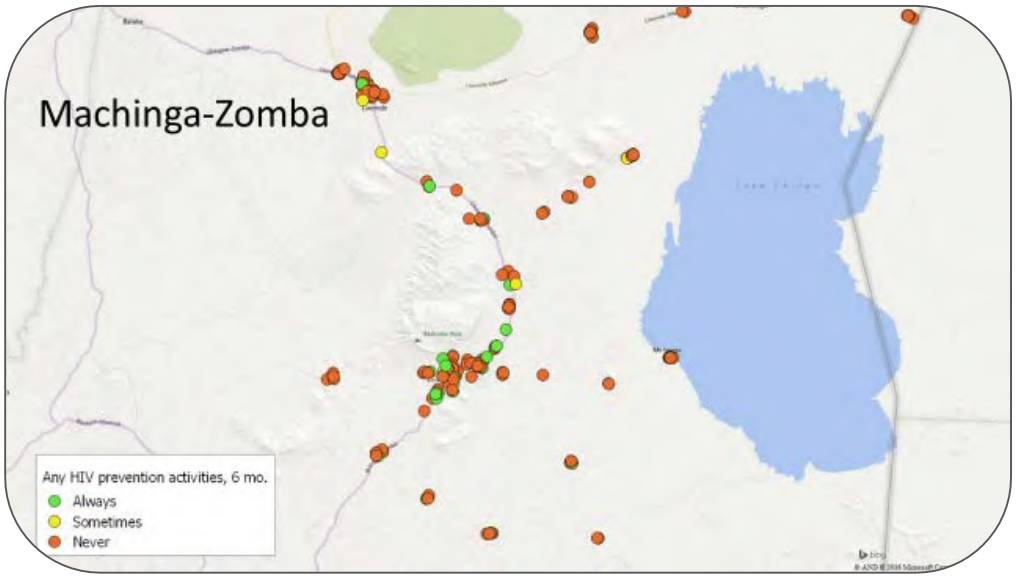


Figure 30 Mzuzu Map

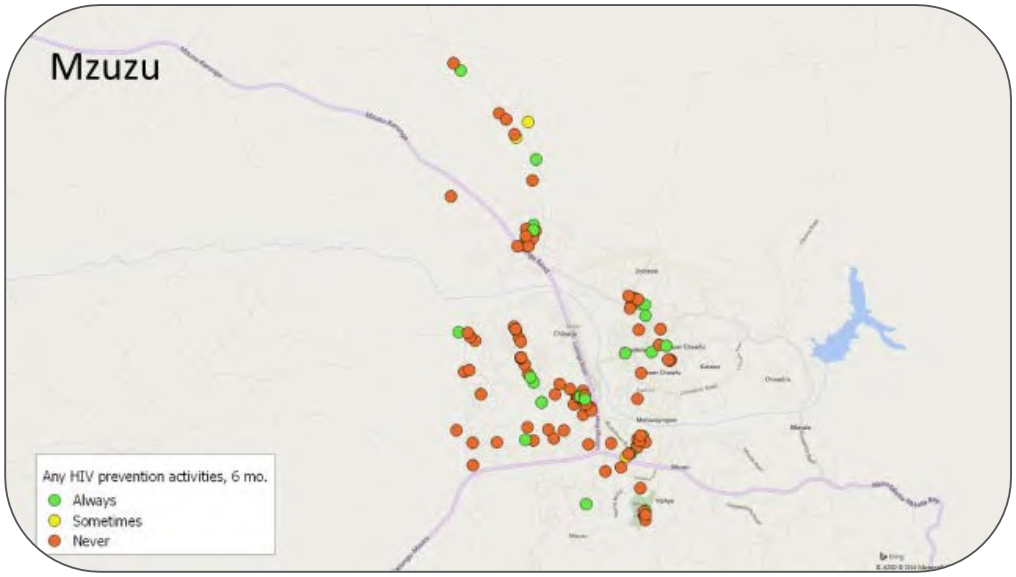
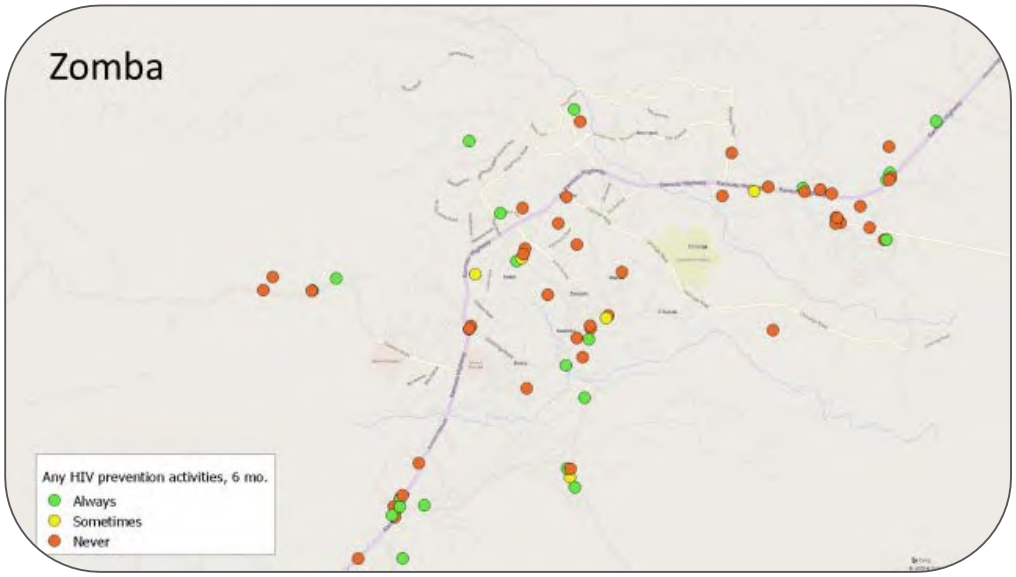


Figure 31 Zomba Map



7. Female Sex Worker Results

7.1 Key Questions

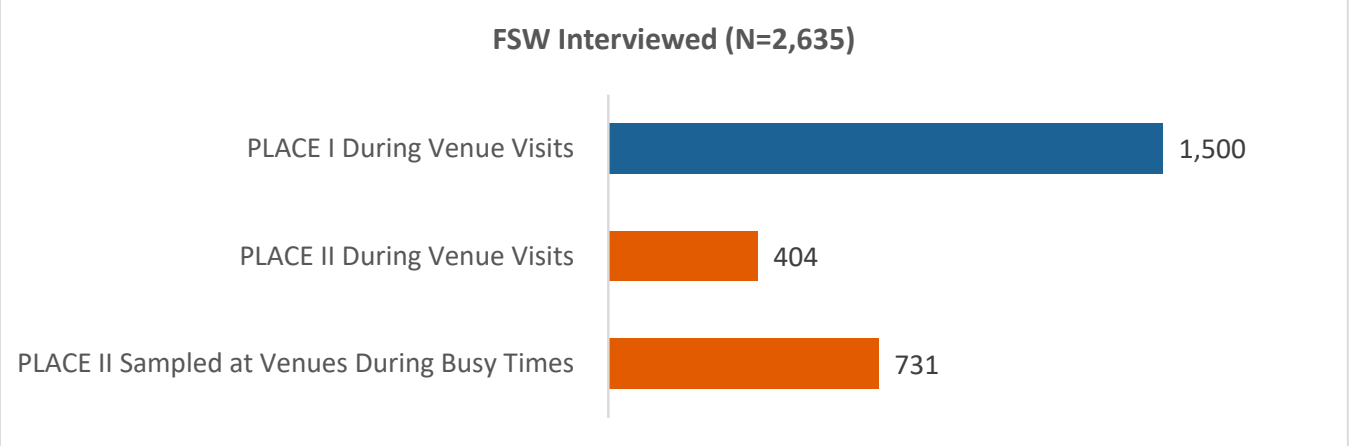
This section answers the following key questions:

- How many FSW were interviewed at PLACE venues?
- What are the characteristics of these FSW?
- Do FSW live at the venues?
- Do FSW use cell phones or social medial to solicit clients?
- How frequently do FSW inject drugs?
- Do FSW engage in anal sex?
- How many sexual partners do FSW have?
- How many FSW have been forced to have sex?
- How many FSW report being infected with HIV?
- Of those infected, ow many are on treatment?

7.2 Number of FSW Interviewed

During PLACE I, 1500 FSW were interviewed at the time of the venue visit to venues in six districts. During PLACE II, 404 FSW were interviewed at the time of the venue visit and 731 were interviewed at venues during a busy time. In total, 2,635 FSW were interviewed.

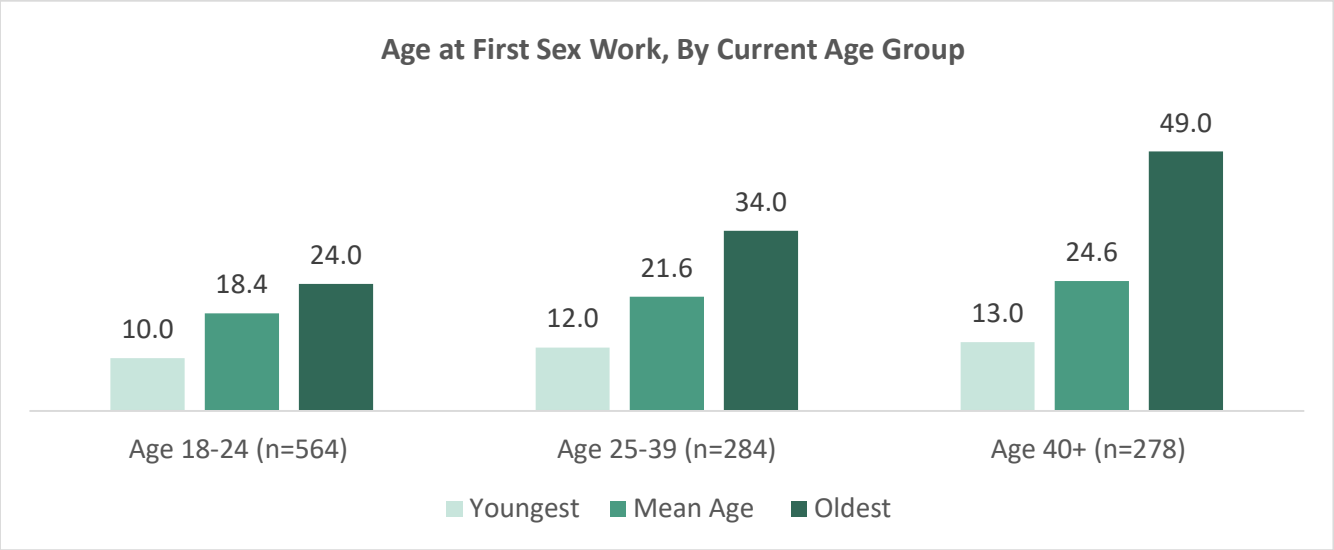
Figure 32 Number of FSW Interviewed



7.3 Age of FSW

In PLACE II, the team asked the age of FSW and the age at which they first engaged in sex work. Among FSW currently age 18-24, the mean age at first sex work was 18. The range was from 10 to 24. Among older age groups, there were also reports of beginning sex work at age 12 and 13.

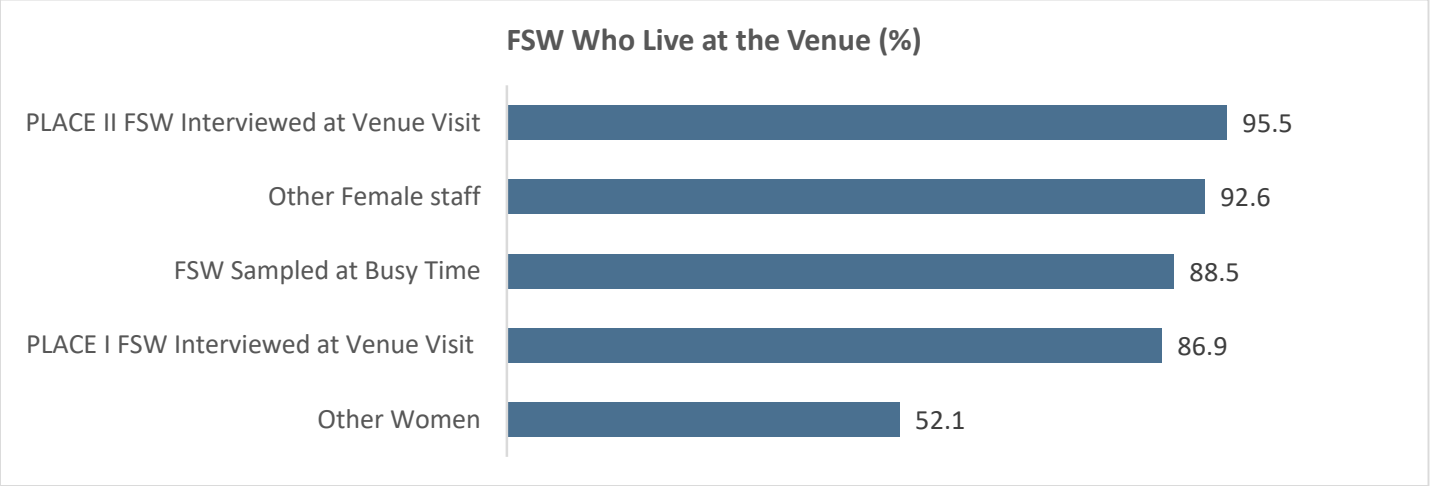
Figure 33 Age at first Sex Work



7.4 FSW Live and Work at the Venue

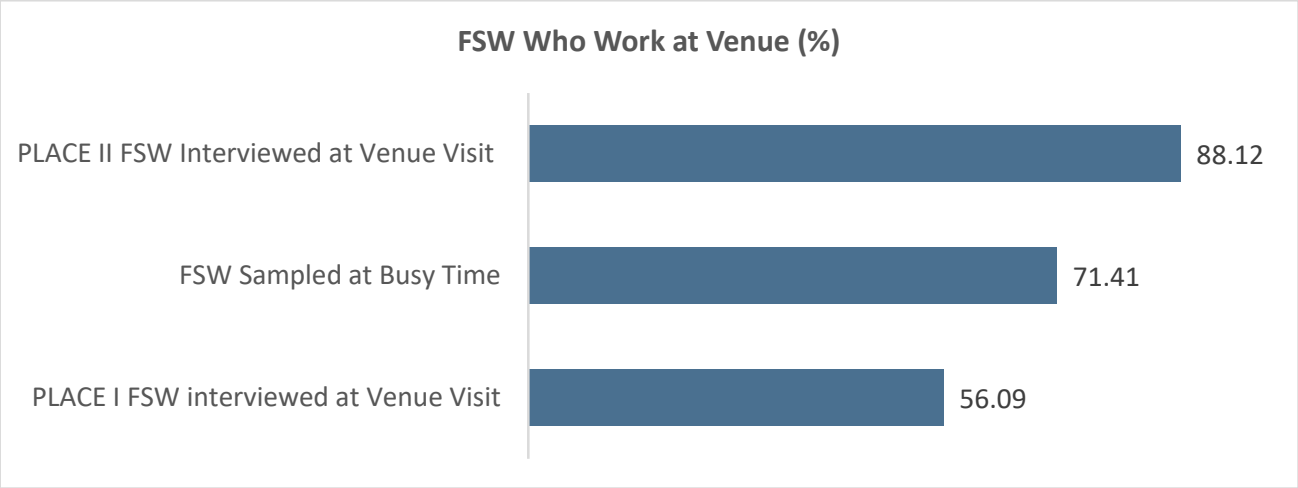
Many of the women interviewed lived at the venue. Over 90% of female sex workers who were interviewed at the time of the venue visit, which usually occurred during the day, reported that they lived at the venue. During PLACE I, 87% of FSW who were interviewed at venues reported living at the venue. During PLACE II, 96% of FSW who were interviewed at the venues reported living at the venue. Other women (not FSWs) who were interviewed at venues during busy times also lived at the venue.

Figure 34 Percent of FSW who Live at the Venue



Most of the FSW interviewed reported that they work at the venues.

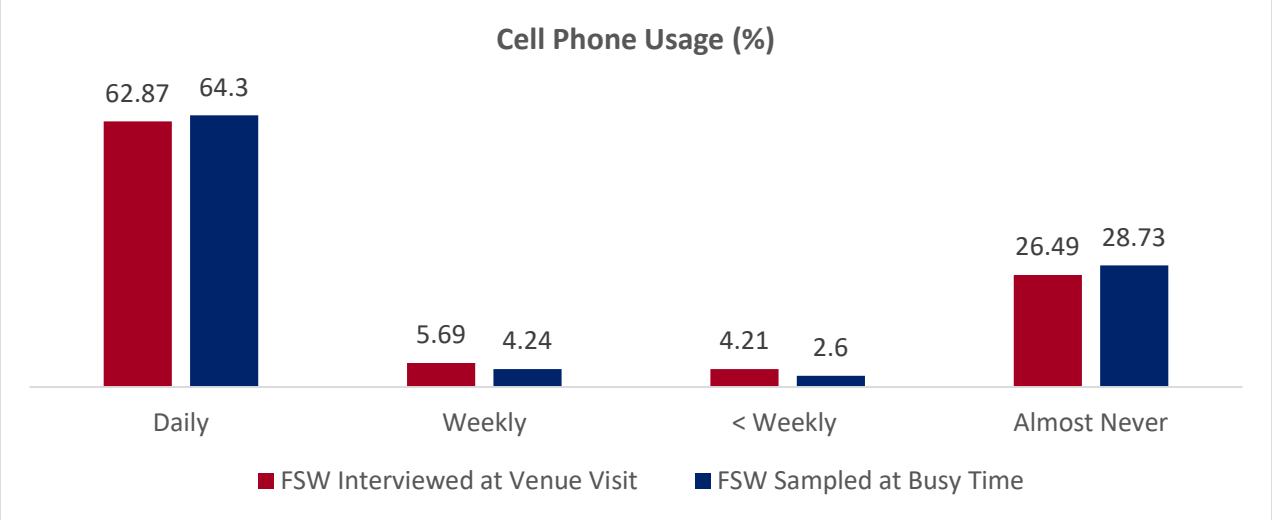
Figure 35 Percentage of FSW Who Self-Report that They Work at the Venues



7.5 Frequency of Cell Phone Use and Use of Social Media

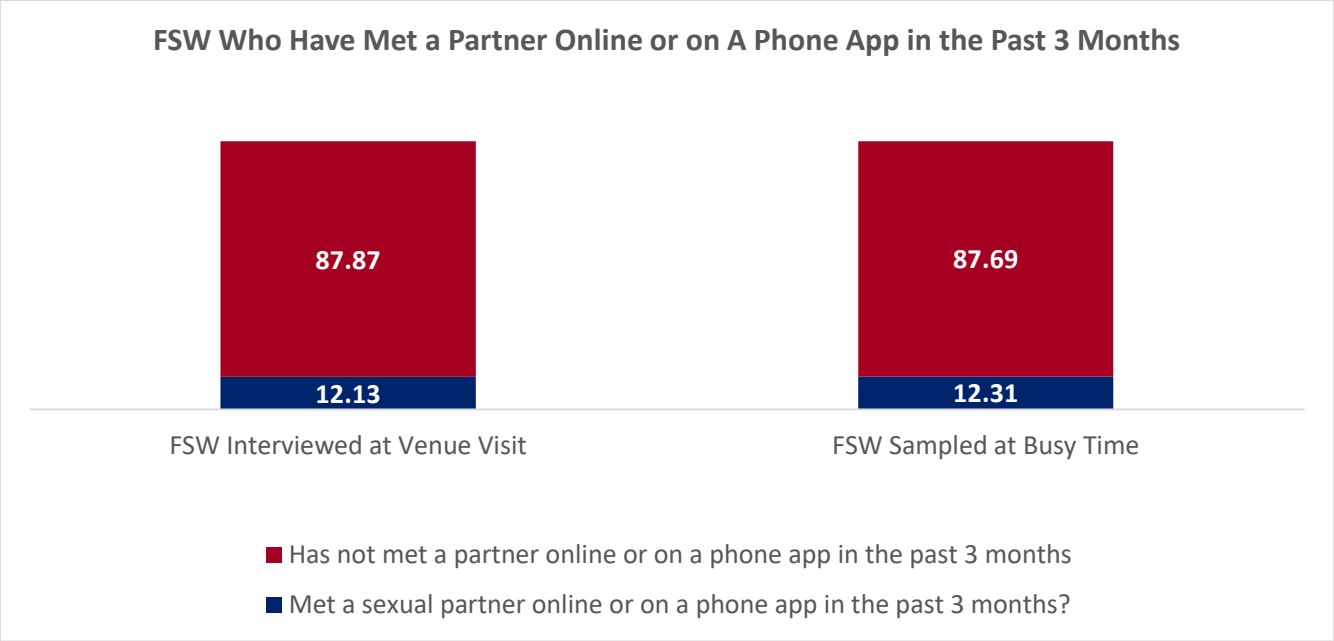
In PLACE II, the team asked about frequency of use of cell phones and social media. The questions were asked: "How frequently do you use a cell phone?" and "How frequently do you use social medial online such as Facebook or other social network site?" Cell phone use was very common. Over 80% of FSW reported that they never or almost never used online social media.

Figure 36 FSW Use of Cell Phones and Social Media



One hundred thirty-nine of 1135 FSW interviewed in PLACE II (12.3%) reported meeting a partner online in the past 3 months. Of these, there is non-missing data for 92 FSW who reported the number of partners met online in the past 12 months. Among these 92 FSW, the average number of partners met online over the past 12 months was 7, with over half of the women reporting two or fewer.

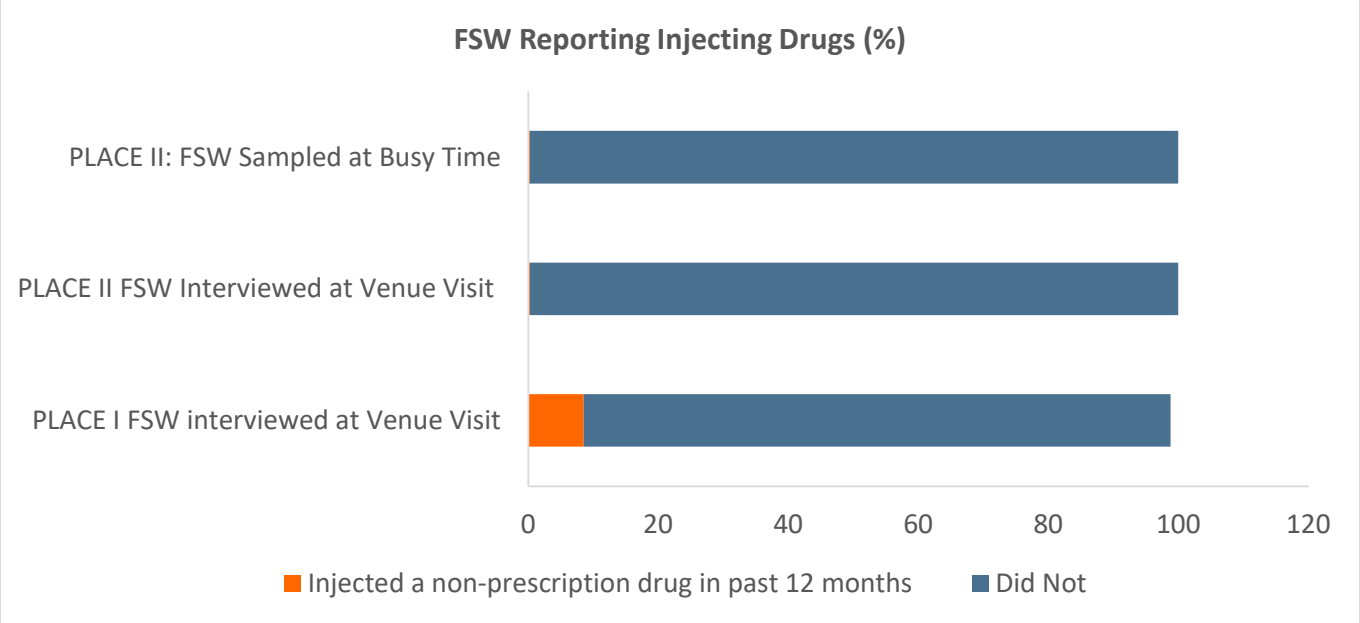
Figure 37 Meeting Clients online or on a Phone App



7.6 Injecting Drug Use among FSW

In PLACE I districts, 8% of FSW reported injecting drugs in the past 12 months. In the more rural districts of PLACE II, very few FSW reported injecting drugs.

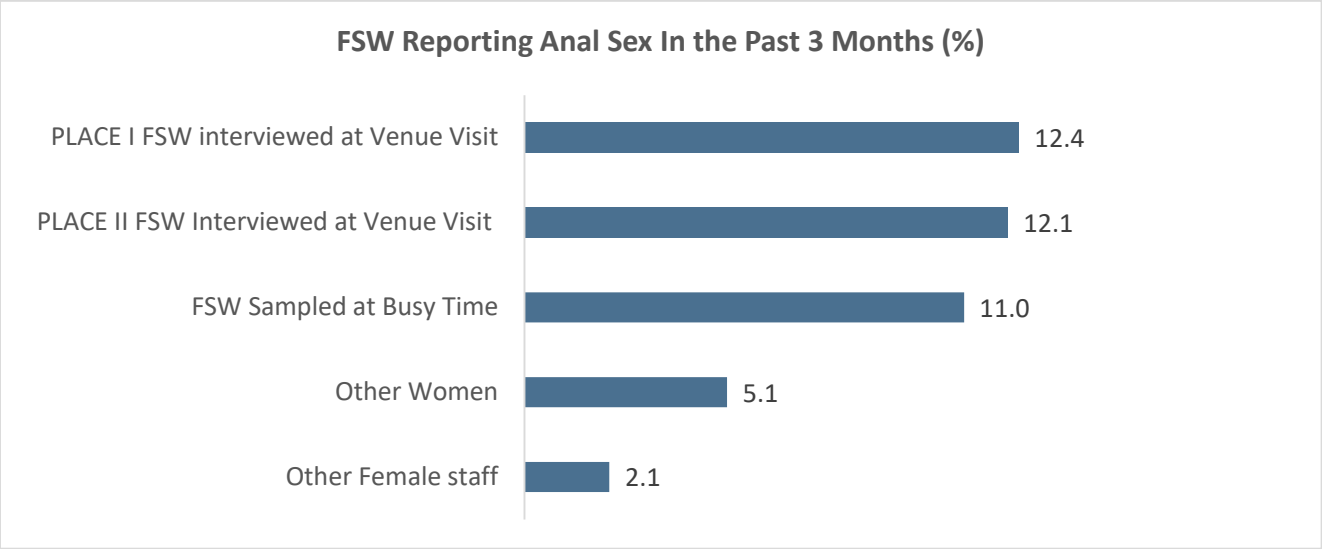
Figure 38 Percentage of Injecting Drug Use Among FSW



7.7 FSW and Other Women Report Receptive Anal Sex with Men

Over 10% of FSW reported anal sex in the past 3 months with a man. Other women interviewed at the venues at a busy time also reported anal sex, but less frequently than the FSW reported anal sex.

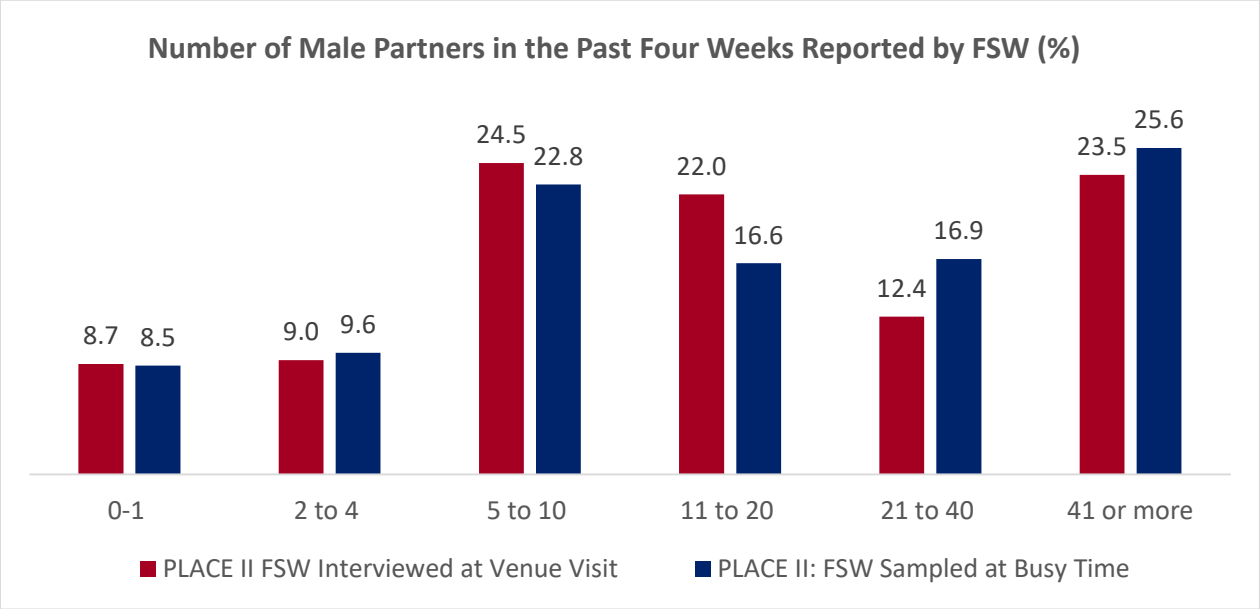
Figure 39 Anal Sex Among FSW



7.8 Number of Male Partners in the Past 4 Weeks

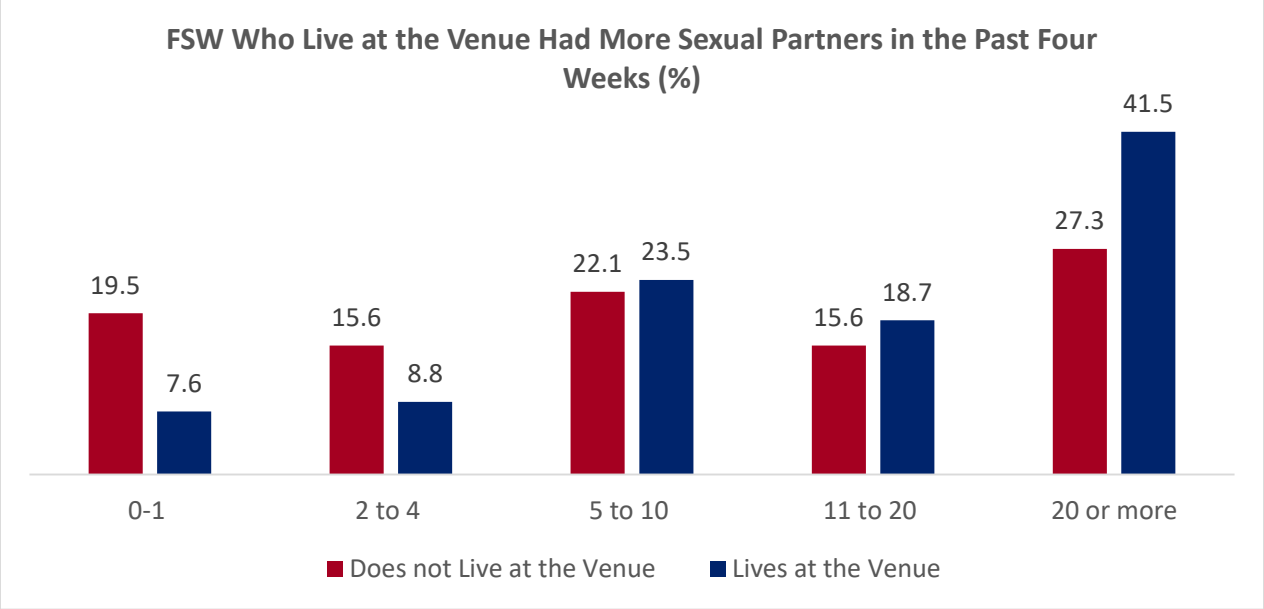
Approximately a fourth of FSW in PLACE II reported more than 40 male partners in the past four weeks. There was not much difference in the number of partners among FSW who were interviewed at the time of the venue visit versus at the venue during a busy time.

Figure 40 Number of Male Partners in the past 4 Weeks



The number of partners in the past four weeks was higher among FSW who lived at the venue compared with those who did not. 41% of FSW who lived at the venue reported >20 partners in the past 4 weeks.

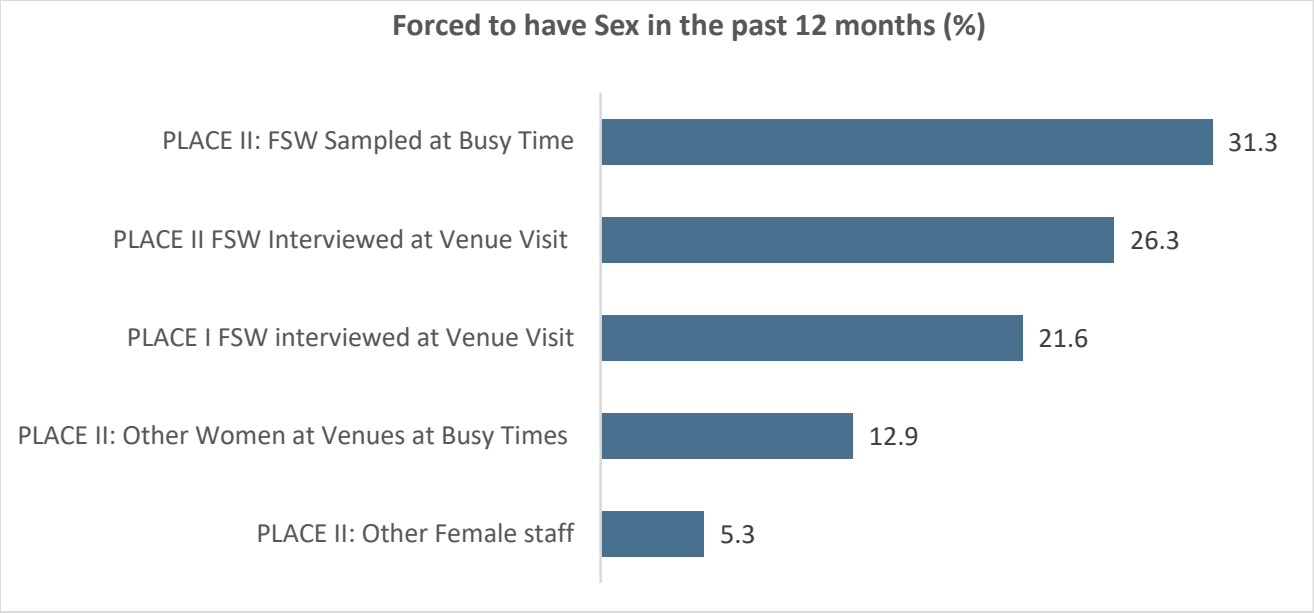
Figure 41 Number of Partners Among FSW Who Live at the Venue



7.9 Forced Sex

Many FSW experienced forced sex in the past 12 months. Women at venues who did not report sex work also reported having been forced to have sex.

Figure 42 Forced Sex Among FSW



7.10 HIV Infection and ART

The team asked FSW about whether they had been tested for HIV and if so, whether they had had a positive test, were ever on treatment, were on treatment now and whether they had taken ART in the past seven days without missing 3 or more doses. Most of the FSW had been tested, but many on treatment reported missing 3 or more doses in the past 7 days.

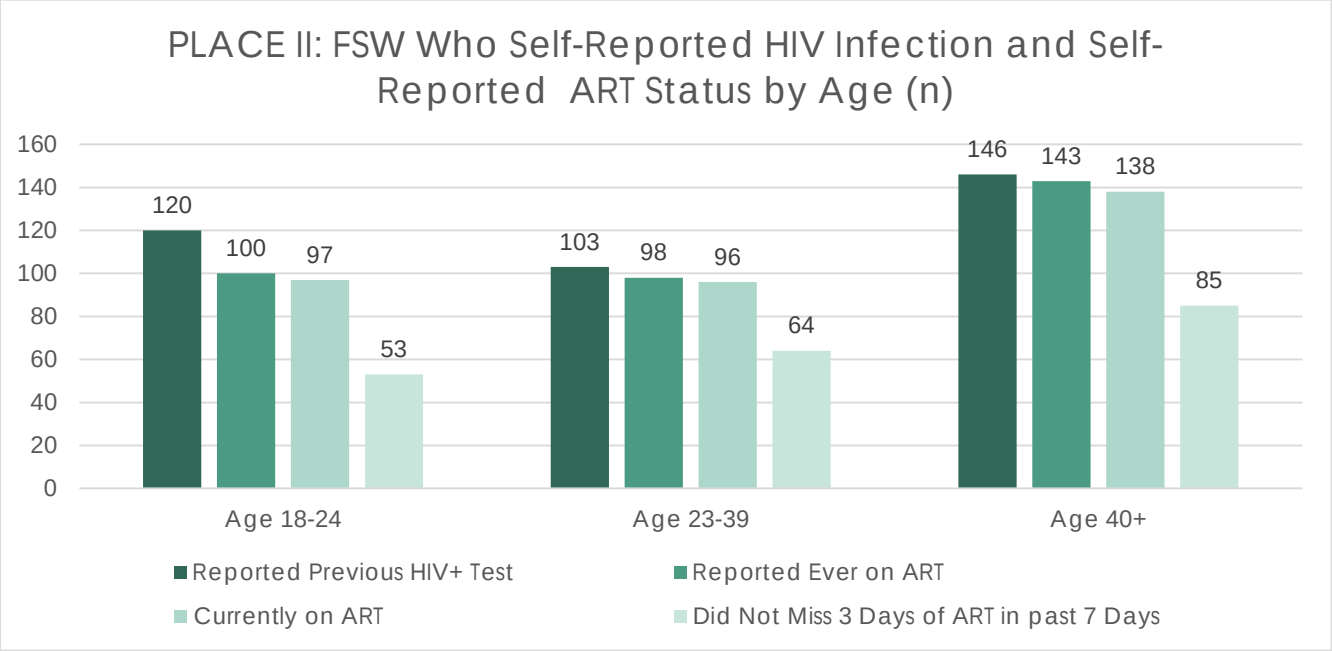
Figure 43 HIV Infection and ART Among FSW: PLACE I and II

	PLACE I	PLACE II
Interviewed (#)	1,470	1,135
Ever Tested (#)	1,415	1,058
Reporting an HIV Positive Test (#)	579	369
Ever on ART (#)	475	341
Now on ART (#)	426	331
ART Compliant (#)	301	202

HIV infection increased with age. Among FSW age 18-24 in PLACE II districts, the rate of infection was 25.9%, increasing to 61.7 percent among FSW over 40. Many of the HIV-positive FSW knew their status and were on treatment. However, almost half of those who knew they were infected were not consistently taking ART

medicine. The team characterized someone as compliant with their ART medicine if they reported NOT missing 3 or more doses in the past week.

Figure 44 PLACE II: HIV Infection and ART Among FSW by Age Group



7.11 Access to Services

Many FSW reported contact with an outreach worker and receiving free condoms. Fewer reported visiting a drop-in center.

Figure 45 Access to Services

%	PLACE I	PLACE II: FSW at Time of Venue Visit	PLACE II: FSW at Busy Time
Bought Condoms in the Past 6 Months	**82.4**	73.2	70.0
Received Free Condoms	61.5	**84.4**	83.7
Visited a Drop-in Center	16.5	25.1	**37.0**
Contacted an Outreach Worker	35.3	65.8	**68.4**

8. MSM Results

8.1 Key Questions

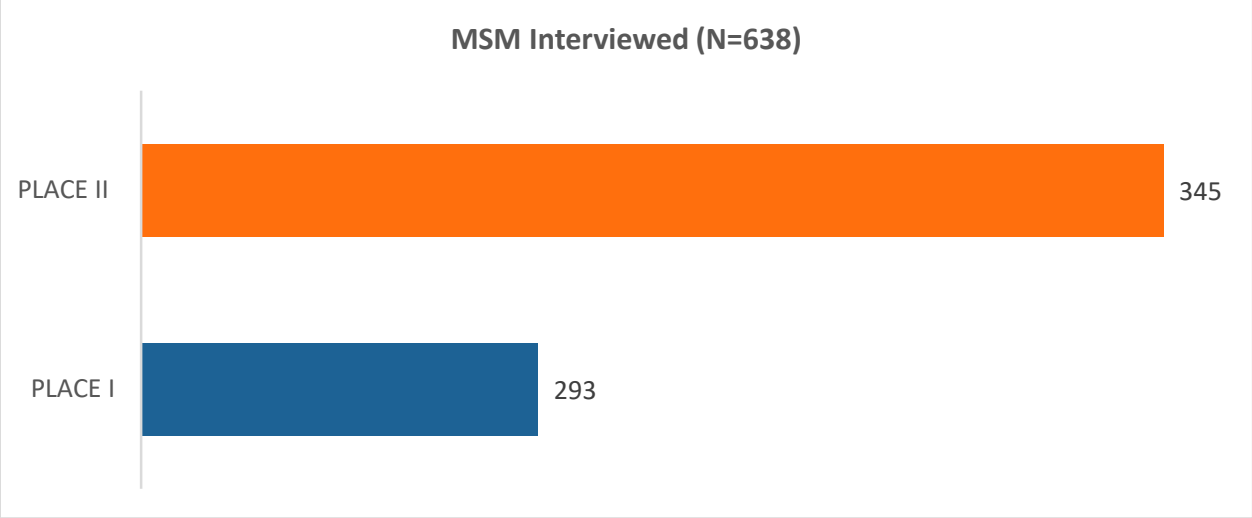
This section answers the following key questions:

- How many MSM were interviewed at PLACE venues?
- What are the characteristics of these MSM?
- Do MSM live at the venues?
- Do MSM use cell phones or social medial to solicit clients?
- How frequently do MSM inject drugs?
- How many sexual partners do MSM have?
- How many MSM have been forced to have sex?
- How many MSM report being infected with HIV?
- Of those infected, how many are on treatment?

8.2 Number of MSM Interviewed

During PLACE I, 293 MSM were interviewed. During PLACE II, 345 MSM were interviewed. In total, 638 MSM were interviewed.

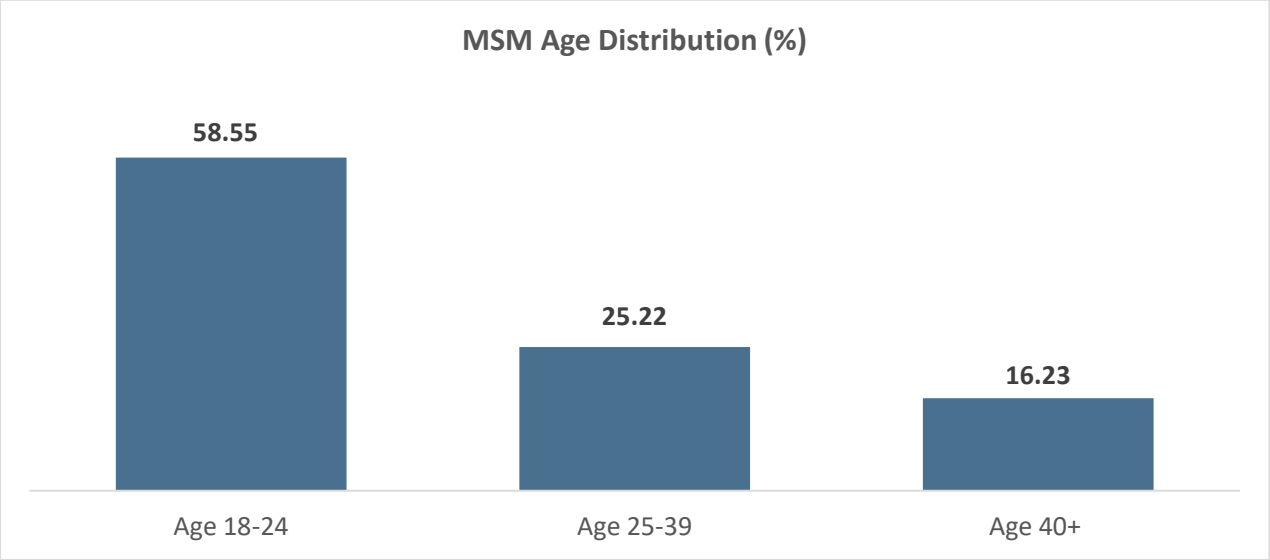
Figure 46 Number of MSM Interviewed



8.3 Age of MSM

In PLACE II, the team asked the age of MSM. Over half were 18-24.

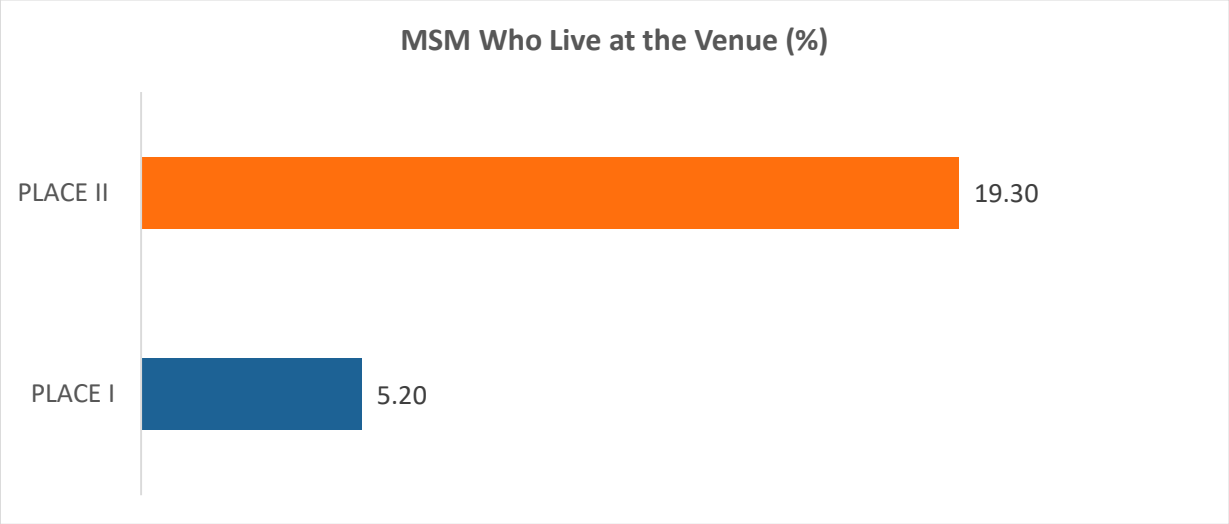
Figure 47 Age Distribution of MSM: Percentage Distribution



8.4 Some MSM Live at the Venue

Few of the men interviewed lived at the venue in PLACE I districts. Nearly 20% did in PLACE II districts.

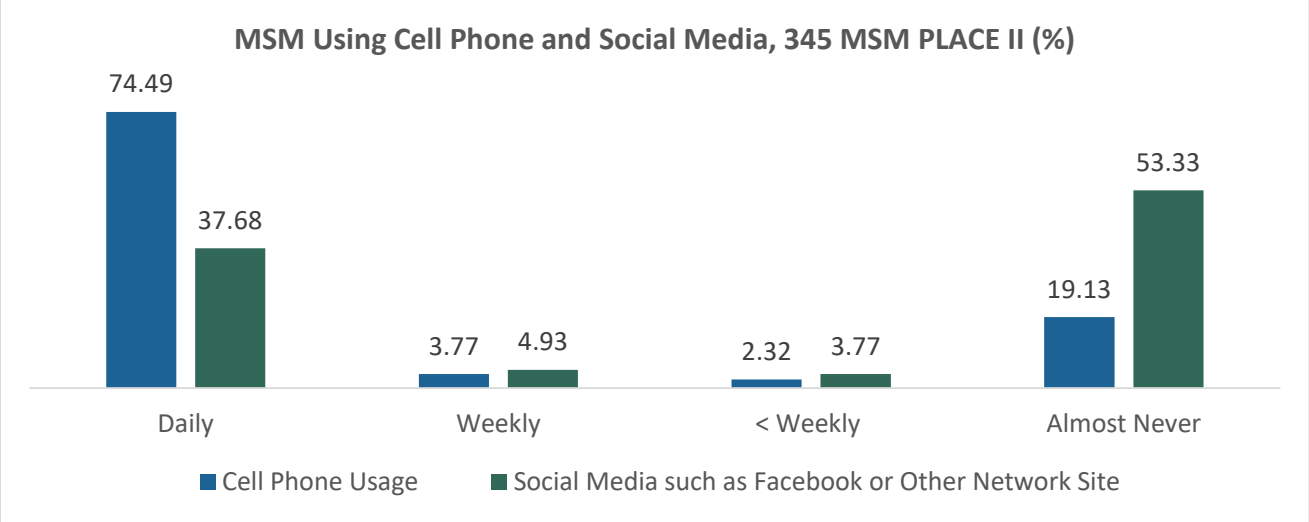
Figure 48 Percent of MSM who Live at the Venue



8.5 Frequency of Cell Phone and Social Media Use

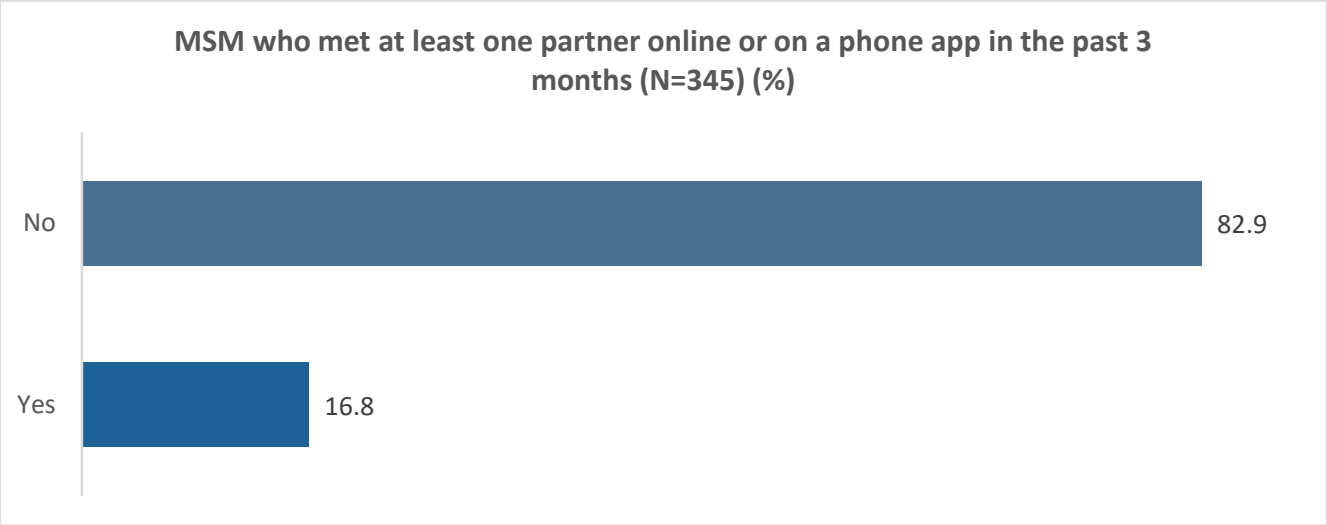
In PLACE II, the team asked about frequency of use of cell phones and social media. The questions were asked: "How frequently do you use a cell phone?" and "How frequently do you use social medial online such as Facebook or other social network site?" Cell phone use was common. Almost 40% reported using social media such as Facebook daily, but half reported never using social media.

Figure 49 MSM Frequency of Cell Phone and Social Media Use



Fifty-eight of 345 MSM interviewed during PLACE II about their characteristics and behaviors reported meeting a new sexual partner online. The mean number of partners met online or on a phone app by these 58 MSM in the past 12 months was 2.1 partners. Of the 345 MSM, 15 (4.3%) reported meeting 3 or more partners online in the past 12 months. The question did not ask whether the person met online was male or female. It is possible that some of the partners MSM met online were female.

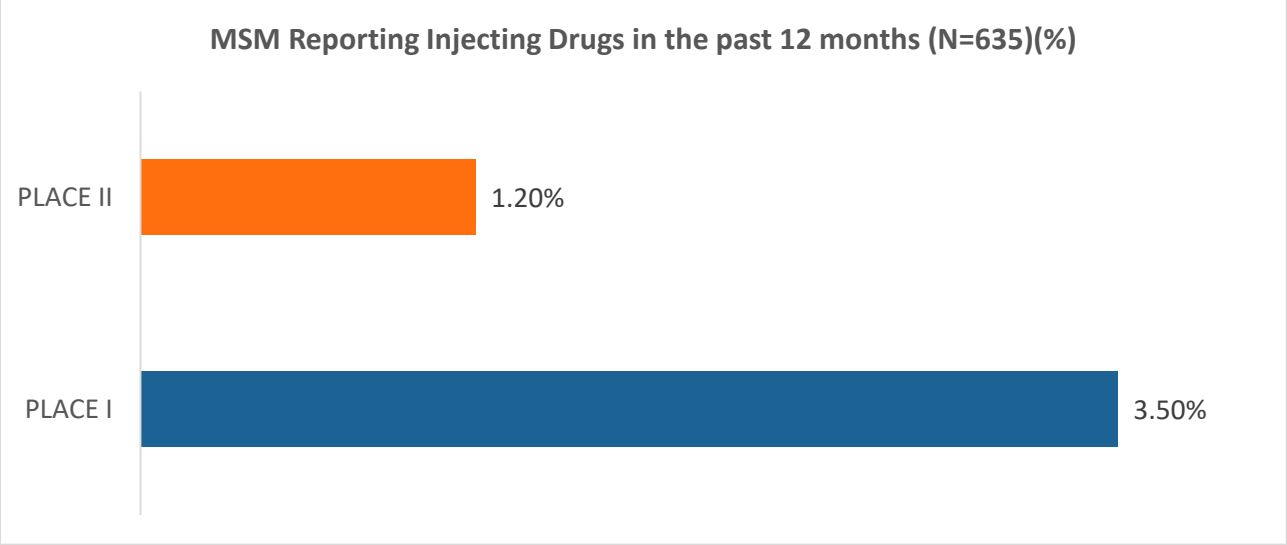
Figure 50 Meeting Clients Online or on a Phone App



8.6 Injecting Drug Use among MSM

In PLACE I districts, 3.5% of MSM reported injecting drugs in the past 12 months. In the more rural districts of PLACE II, very few MSM (1.2%) reported injecting drugs.

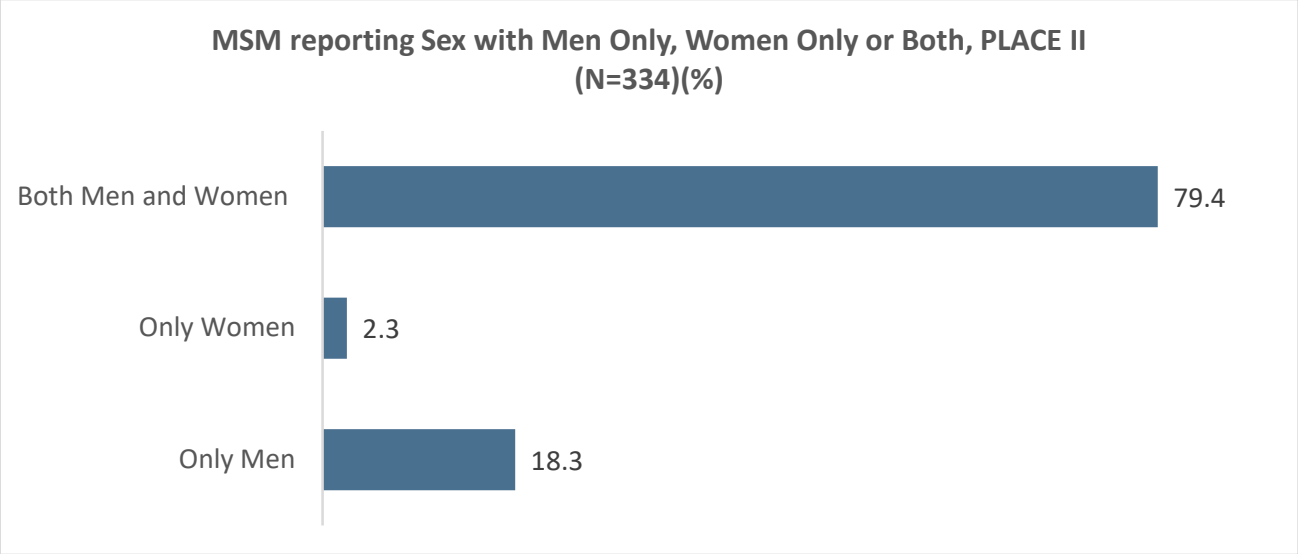
Figure 51 Injecting Drug Use Among MSM



8.7 MSM Reporting Sex with Men, Women and Both

About 80% of MSM reported sex with both men and women. 18% reported only having sex with men and 2% reported no male or female partners in the past 12 months. These 2% of men self-identify as gay men and are included as MSM.

Figure 52 PLACE II: Percentage of MSM reporting sex with Women

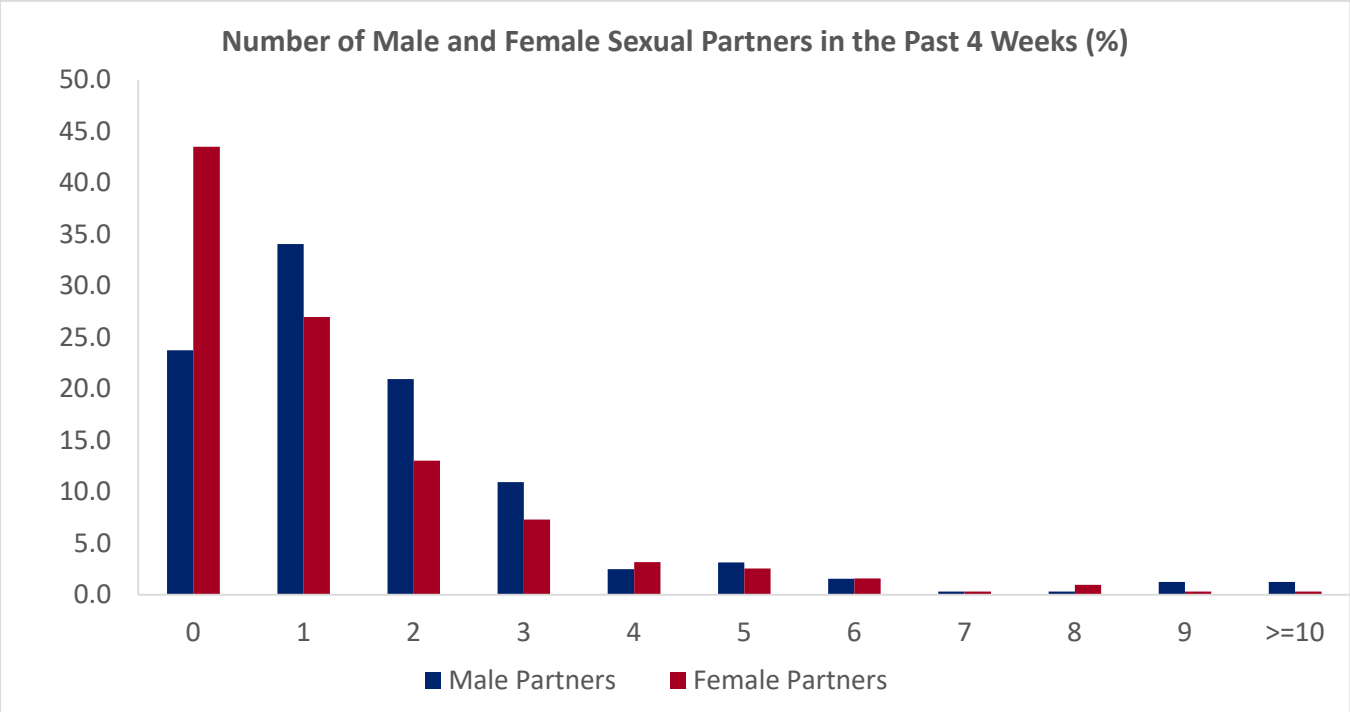


8.8 Number of Male and Female Partners in the Past 4 Weeks

Approximately a fourth of MSM reported no male partners in the past four weeks and another third reported one male partner. Fewer than 10% had three or more male partners in the past four weeks. Over half of MSM reported a female partner in the past four weeks.

The number of partners in the past four weeks was higher among MSM who lived at the venue compared with those who did not. 41% of MSM who lived at the venue reported >20 partners in the past 4 weeks.

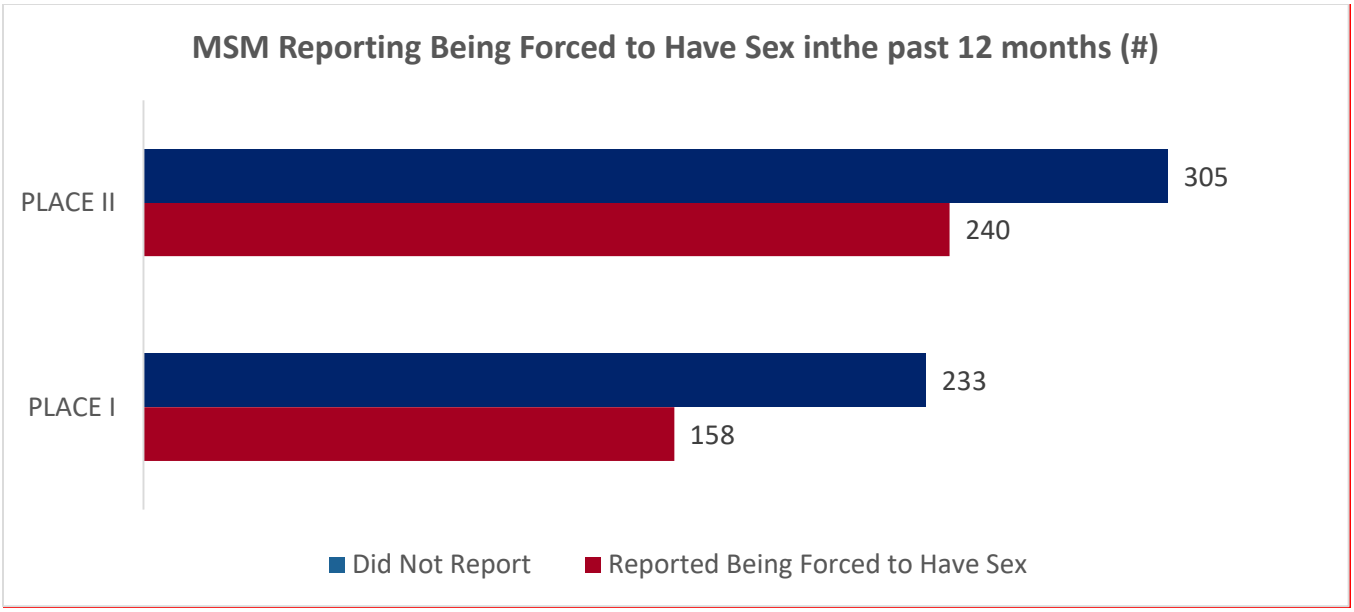
Figure 53 Number of Male and Female Partners in the past 4 Weeks



8.9 Forced Sex

Many MSM experienced forced sex in the past 12 months. 19.9% of MSM interviewed during PLACE I and 11.6% of MSM interviewed during PLACE II reported being forced to have sex in the past 12 months. During PLACE I, 293 MSM were interviewed. During PLACE II, 345 MSM were interviewed

Figure 54 Forced Sex Among MSM



8.9 PLACE II: Self-Reported HIV Infection and ART

Among MSM, almost all had been tested at least once. Of those who reported having received a positive test, however, only 9 of 15 in PLACE I districts and 11 of 31 in PLACE II districts reported having ever been on ART.

Figure 55 Self-Reported HIV Infection

	PLACE I	PLACE II
Interviewed (#)	281	345
Ever Tested (#)	274	324
Reporting an HIV Positive Test (#)	15	31
Ever on ART (#)	9	11
Now on ART (#)	9	9
ART Compliant (#)	8	7

8.10 Access To Services

Over three-fourths of MSM reported receiving free condoms but only approximately a third reported visiting a drop-in center.

Figure 56 Access to Services

%	PLACE I	PLACE II: MSM at Time of Venue Visit
Bought Condoms in the Past 6 Months	55.3%	**66.1%**
Received Free Condoms	77.0%	**81.2%**
Visited a Drop-in Center	**39.0%**	32.0%
Contacted an Outreach Worker	41.7%	**67.8%**

9. Transgender Population

9.1 Background on Transgender Populations in Malawi and this Study

Transgender is an umbrella term for people whose gender identity and expression does not conform to the norms and expectations traditionally associated with the sex assigned to them at birth. It includes people who are transsexual, transgender or otherwise gender non-conforming.[1] In Malawi, there are programs with outreach to transgender women and men but little is known about the number or behavioral characteristics of transgender persons in Malawi. UNAIDS identifies transgender people as a key population with respect to HIV prevention owing to the fact that their HIV prevalence is among the highest in the world and they commonly

[1] WHO Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations – 2016 Update.

experience severe stigma and discrimination as well as GBV. Transgender women in low- and middle-income countries are almost 50 times as likely to have HIV as compared to the general population.[2]

In countries where there are data on transgender persons, generally HIV prevalence is high and access to services low. Transgender persons have often been included as a sub-group within the MSM population. This approach is no longer recommended because transgender women are not men and should be considered as a separate group for appropriately targeted services. The National AIDS Commission of Malawi requested that the team include transgender persons as one of the key populations included in this study. In addition, the Key Populations Technical Working Group requested that transgender persons be described separately from MSM and FSW.

According to CEDEP, trans-identified Malawians live in an intensely transphobic society that upholds heteronormativity and associated gendered expectations. As these individuals' appearance and behaviors fall outside these norms and expectations, they are shunned by family, friends, religious community, and educational facilities. Amid such stigma, these individuals struggle to come to terms with their identities and lack outlets for discussing the complex issues associated with gender dysphoria and transition. There have been observations of high rates of drug and alcohol abuse among transgender men and women, who often utilize these substances to self-medicate amid feelings of depression, loneliness, or social exclusion. Trans individuals also struggle with how to 'come out' to family and friends, and how to navigate the job sector as a gender non-conforming individual, among other challenges.

9.2 Information Obtained about Transgender Persons in this Study

When the team visited a venue and interviewed a venue informant, the informant was asked about the people who visit the venue. The team included transgender people as one category.

When the team interviewed people at the venue during busy times (PLACE II districts only), all respondents were asked whether they were born male or female and whether they identify now as a man or a woman. Those who responded they were born male and identify now as a woman are transgender women. Those who responded they were born female and identify now as a man are transgender men. This approach is the method that has been recommended by UNAIDS as the most appropriate way to identify transgender people in a survey. For some people, becoming aware of one's transgender identity is a process that evolves over time. Our questions do not capture this process well.

People interviewed at venues at busy times were sampled randomly from the people at the venue at that time. In addition, special efforts were made to recruit MSM and transgender people to a particular venue identified by the MSM community in the district. No separate recruitment was made for transgender persons. They were invited to participate along with the MSM at the "special" MSM venues identified by CEDEP or they could participate via random sampling of participants at any of the randomly selected venues. To summarize, special

[2] Baral, S, et al. (2013). Worldwide burden of HIV in transgender women: a systematic review and meta-analysis. Lancet Infect Dis. 2013 Mar;13(3):214-22. doi: 10.1016/S1473-3099(12)70315-8. Epub 2012 Dec 21.

efforts were made to recruit MSM and Transgender Persons to venues identified by the district as venues that would be the most acceptable to these populations.

9.3 Results

The team estimates that there are at least 94 venues in the PLACE I and II districts in Malawi where transgender people go to meet new sexual partners. These estimates are based on interviews with the General Venue Informant and weighted to reflect sampling weights. It is likely that there are more venues than these as venue informants may be unlikely to know whether transgender people come to the venue or not. The number of venues with transgender persons attending is very similar to the number where MSM visit. It is possible that the General Venue Informant did not discriminate well between the two populations.

Table 9.1 Number of Venues with Key Populations by Region, Estimated

	Central	Northern	Southern	All
Transgender People (#)	51	3	40	94
Men Who Inject Drugs (#)	51	4	42	97
Men Who Have Sex with Men (#)	357	116	244	717
Men Who Buy Sex (#)	1,266	467	1,307	3,040
Female Sex Workers (#)	1,729	646	1,827	4,202

Thirty-eight transgender women in 10 districts were interviewed as part of the PLACE II study. Nobody self-identified as a transgender man.

Table 9.2 Districts where Transgender women were Interviewed

District	Transgender (#)
Karonga	12
Salima	7
Chikhwawa	5
Mwanza	3
Rumphi	3
Ntcheu	3
Nkhotakota	2
Dedza	1
Dowa	1
Mchinji	1

26 were age 18-24; 6 were 25-39 and 6 were 40 or older. Seven of the 38 reported living at the venue. Fifteen reported having one sexual partner in the past four weeks. 16 reported 2-4 partners and 7 reported five or more. All reported having had sex with men. None reported having sex with a woman.

One had injected a non-prescription drug in the past 12 months. Over 80% reported purchasing condoms in the past 6 months and 10 reported visiting a drop-in center for female sex workers. Twenty-nine had accessed condoms for free and 21 had received information from an outreach worker.

Only 15 of the 38 were tested for HIV as part of PLACE. 14 were HIV negative. The other person did not disclose their test result. Two reported having been previously told they were infected with HIV and both reported being currently on treatment.

10. Step 5: Size Estimates of Key Populations

10.1 Key Questions

This section answers the following key questions:

- How many female sex workers are out at venues on a busy Saturday night?
- How many female sex workers are reachable at venues over the course of four weeks?
- How many MSM are reachable at venues at a busy time?

10.2 Number of FSW Reachable at Venues on Saturday Night from 11 pm until 2 am Per the General Venue Informant

One estimate of the number of FSW reachable at venues was based on information provided by the General Venue Informant. This estimate is available for PLACE I and PLACE II districts. For PLACE I districts, this is the recommended estimate for FSW. PLACE I districts are Blantyre, Lilongwe, Mzuzu City (not a district), Zomba, Machinga, and Mangochi. This estimate uses information from all the venue informants and focuses on a narrow time period, which reduces the likelihood that the same person is counted at two different venues. It can underestimate the total since people who do not visit on Saturday nights would be missed. Many FSW, however, reported living at the venue and/or visiting daily. It is the recommended method for estimates for PLACE I districts because the method used for PLACE II was not available.

The method used for generating this estimate is the following:

1. Determine the number of Operational Venues in the District with FSW by applying sampling weights to the venues with FSW that were visited (columns 1 and 2 in Table 10.1)
2. Determine the average number of FSW at venues on Saturday night in venues with FSW in the district per the Venue Informant
3. Multiply this average by the estimated number of venues with FSW to obtain an estimate of the total number of FSW at venues on Saturday Night (column 5 in Table 10.1)
4. Use *proc survey means* in SAS to provide a confidence interval around the size estimate, taking into account survey strata and sampling weights
5. Estimate the percentage of the female population age 15-49 who are sex workers if the size estimate is correct (Table 10.2).

Table 10.1 Estimates of the Number of FSW Reachable at Venues at a Standard Busy Time, As Reported by a Venue Informant at Sampled Venues

	Venues with FSW Reported During Venue Visit (N)	Up-Weighted Number of Operational Venues with FSW	FSW on Saturday Night 11pm-2 am, Reported	FSW on Saturday Night 11pm-2 am, Total Estimate for the District	95% CI Lower	95% CI Upper
Central Region						
Dedza	64	136.4	5.6	760	608	912
Dowa	75	149	7.1	1,053	506	1,600
Kasungu	84	124.1	11.3	1,407	970	1,843
Lilongwe	584	824.9	8.4	6,944	5,752	8,136
Mchinji	84	85.4	9.1	777	540	1,014
Nkhotakota	66	138.8	7.6	1,056	771	1,341
Ntcheu	74	118.1	4.7	556	413	699
Salima	68	152.5	16.7	2,542	616	4,467
All	**1099**	**1729.2**	**8.7**	**15,094**		
Northern Region						
Nkhata Bay	62	89.4	6.1	542	362	722
Mzuzu	126	134.3	10.6	1,419	905	1,932
Karonga	77	126.2	7.3	926	724	1,129
Rumphi	75	102.1	4.8	488	372	603
Mzimba	63	194	3.5	671	441	901
All	**403**	**646.1**	**6.3**	**4,045**		
Southern Region						
Balaka	50	87.1	4.6	404	266	543
Chikhwawa	57	148.1	4.9	725	478	972
Mwanza	69	71.1	6.5	459	341	577
Neno	52	52.6	4.9	259	139	380
Blantyre	417	893.9	6.9	6,200	4,867	7,532
Mangochi	109	162.8	5.7	933	727	1,139
Machinga	93	195.5	5.2	1,026	767	1,284
Zomba	144	217.3	8	1,731	1,043	2,419
All	**991**	**1,828.2**	**6.4**	**11,737**		
Total	**2,493**	**4,203.5**	**21.4**	**30,876**		

The next table shows the percent of the female population engaged in sex work, based on the estimates in Table 10.1 from the General Venue Informant.

Table 10.2 Percent of the Female Population Age 18-49 Engaged in Sex Work, Based on FSW Population Size Estimates from the General Venue Informant

	FSW on Saturday Night 11pm-2 am, (Question B48) Estimate for the District	95% CI Lower	95% Ci Up10per	Female Population 2017 Age 18-49	Female Population Engaged in Sex Work (%)
Central Region					
Dedza	760	608	912	150,347	0.5%
Dowa	1,053	506	1,600	162,439	0.6%
Kasungu	1,407	970	1,843	166,578	0.8%
Lilongwe	6,944	5,752	8,136	293,533	2.4%
Mchinji	777	540	1,014	117,215	0.7%
Nkhotakota	1,056	771	1,341	76,598	1.4%
Ntcheu	556	413	699	114,895	0.5%
Salima	2,542	616	4,467	86,841	2.9%
Northern Region					
Nkhata Bay	542	362	722	57,228	0.9%
Mzuzu	1,419	905	1,932	56,181	2.5%
Karonga	926	724	1,129	70,068	1.3%
Rumphi	488	372	603	44,107	1.1%
Mzimba	671	441	901	188,554	0.4%
Southern Region					
Balaka	404	266	543	82,053	0.5%
Chikhwawa	725	478	972	108,127	0.7%
Mwanza	459	341	577	21,771	2.1%
Neno	259	139	380	35,727	0.7%
Blantyre	6,200	4,867	7,532	308,466	2.0%
Mangochi	933	727	1,139	215,077	0.4%
Machinga	1,026	767	1,284	125,296	0.8%
Zomba	1,731	1,043	2,419	135,060	1.3%

The strengths of size estimates based on the General Venue Informant include:

1. Size estimates are available at the venue level for every venue visited based on data from the site.
2. It does not require interviews with key population informants at the site, thus reducing the time required for data collection.
3. It is a reasonable estimate for the number of key populations who can be reached at the venue during the busy time at the site. Even if people visit multiple venues, the number estimated for a particular venue has value for programs in terms of the number who can be reached at the site.

The weaknesses of these estimates include:

1. The estimate does not include people who do not visit these venues.
2. The estimate relies on the validity of a General Venue Informant's characterization of another person as a member of a key population.
3. General Venue Informants may be reluctant to report the number of MSM or FSWs at the site. The definition of a key population is difficult to communicate and makes the numbers provided difficult to interpret. The definition of a transgender person is often difficult to communicate. However, in Malawi, FSW at the venue did not report many additional venues with FSW. In PLACE I, only 12 additional venues were identified as venues with FSW by FSW onsite. In PLACE II districts, only 2 additional venues were identified by FSW. The team decided not to include these additional venues as operational venues with FSW as the report from the General venue informant covered more venues and appeared to be reliable. In other countries, these additional venues have been added as "underwater" venues, meaning that they do not show on the surface as FSW venues but are places where FSW can be reached. This was not necessary in Malawi.
4. Even if the respondent is willing to communicate the number, he or she may not know how many key populations visit the venue because they may not be readily apparent as a member of a key population or the venue is so large or dark or its boundaries so amorphous that it is difficult to count people reliably.
5. The size estimate does not fully adjust for people who may be counted at two venues if people visit more than one venue during the three-hour period.

10.3 Saturday Night FSW Size Estimate Based on Interviews with PLACE I FSW

Under PLACE I, the team also asked female sex workers who happened to be at the venues during the venue visit how many FSW come to the venue on Saturday night. Their estimate was similar to the estimate from the General Venue Informant in most districts. Interviewers were asked to interview up to three FSWs at venues that were identified by community informants as venues with FSWs. The women were asked how many FSW visit the venue on a Saturday night from 11 p.m. to 2 a.m. and of those people, how many visited another venue during that time, and how many venues they visited.

Some analysis was done to improve the estimates after the initial presentation of the results in Malawi in September 2016. For estimates from FSWs who reported more than 300 FSWs visiting the venue during the time period, the figures were trimmed to 100. An estimate of >300 was not reasonable for those venues, and the high numbers were too influential on the size estimate. Estimates from women who reported that they did not know how many FSWs were at the venue at the time were considered missing in estimating the mean number reported at the venue in the district and thus did not affect the size estimate. Some women reported visiting many venues (more than 20) during the three-hour period of 11 p.m. to 2 a.m. The interviewers should have probed when hearing this implausible answer. All responses from an FSW who reported visiting more than three venues in the three-hour time period were trimmed to three. It is not reasonable to visit more than three venues in a three-hour period and stay at the venue long enough to be known and remembered at the site.

The method for this estimate is the following (See table 10.3):

1. Determine the number of Female Sex Workers interviewed onsite (Column 1).
2. Determine the number of venues where FSW were interviewed (Column 2.)

3. Determine the median number of FSWs reported by FSWs to be at the venue on Saturday night between 11 pm and 2 am. Adjust the median to take into account the number of FSW who visit other venues and the number of venues they visit.
4. Recall the number of operational venues with FSW (Column 4). See Table 10.1.
5. Use *proc survey means* in SAS to estimate the sum of FSWs at venues on Saturday from 11 pm to 2 based on the median number reported by FSW at the venue and weighting the estimate to take into account FSW at all of the FSW venues (column 5).
6. Use *proc survey means* in SAS to provide a confidence interval around the size estimate.

Table 10.3 Estimate of the FSW Population Size Based on Interviews with 1500 FSWs at Venues during PLACE I.

	1. FSW Interviewed at Venues (#)	2. Venues Where FSW Interviewed (#)	3. Median FSW Reported by FSW at Venues on Saturday Night (#)			4. Operational Venues with FSW (#)	5. Population Size Estimate for FSW Based on Interviews with 1500 FSWs		
			Median Number Per Site	95% Confidence Limit			Estimate	95% Confidence Limit	
Lilongwe	622	282	8.8	7.8	9.9	825	7,333	6,456	8,210
Blantyre	105	154	9.0	6.7	11.2	894	6,959	5,220	8,697
Mangochi	353	55	6.8	5.3	8.2	163	1,145	896	1,393
Machinga	164	44	6.5	4.7	8.2	196	1,311	959	1,662
Mzuzu	102	50	8.5	5.5	11.4	135	1,431	933	1,928
Zomba	154	63	6.6	4.4	8.8	217	1,355	901	1,809

The strengths of this estimate are:

1. It is based on information from FSWs who are at the venue and hence may have more face validity than estimates from a General Venue Informant.
2. It uses a standard busy time, which eliminates the problems of having estimates from venues over a range of time periods.
3. It adjusts for the number of people visiting other venues during the standard busy time and how many venues they visit during that time.
4. It uses the information from visited venues to estimate the number at the venues not visited.
5. Information is not provided for as many venues as the estimate from the venue informant.
6. There may be more face-validity in asking an FSW about how many FSW are at the venue; however, in this case the General Venue Informant gave similar answers, fewer unrealistic estimates and provided them at more venues.

The weaknesses of this estimate are:

1. The range of estimates provided by FSWs at some venue was quite large and suggests that some people have difficulty estimating these figures and/or that venues that cluster together may have people counted at more than one place.
2. FSWs may not themselves go to the venue Saturday and would not know how many are at the site.

3. The people providing estimates may not be representative of the FSWs at the venue or knowledgeable about the number of FSWs at the site, particularly if there are subgroups of FSWs not known to those responding to the questions.
4. The estimate assumes that the number of sex workers at other venues is similar to venues where FSWs were interviewed. This is unlikely. Consequently, the estimate may overestimate the actual number of FSWs in the district.
5. The current estimates could be improved further by using data from Zomba where the full PLACE method was implemented to adjust the estimates.
6. The estimate is decreased significantly when taking into account reports of visiting other venues. The time period is only three hours. It is likely that some women over-reported the number of venues that are visited during the three hours.
7. Note that the estimate is not an estimate of all FSWs in the district as it excludes those who do not go to venues.

10.4 Comparison with FHI 360 Hotspot Validation

The two FSW estimates above can be compared with the estimates from the Hotspot validation that FHI 360 implemented in February 2017. See Appendix 7 for their report. The PLACE estimates for Blantyre and Lilongwe were significantly higher than from the Validation walk.

10.4 Comparison of FSW Estimates

District	FY17 FSW Population Estimates from Hotspot Validation Walk by FHI360	PLACE Estimate Based on General Venue Informant	PLACE Estimate based on FSW Interview	Comments
Mangochi	1,024	933	1,145	Within 95% CI
Blantyre	3,151	6,200	6,959	PLACE estimate is larger. Perhaps the sites that were not visited by PLACE had fewer FSW than those visited, resulting in the extrapolated figure being too large. Perhaps the PLACE study included more areas in the district as it included non-urban areas
Lilongwe	3,261	6,944	7,333	Similar as Blantyre.
Mzuzu	1,527	1,419	1,431	Within 95% CI
Machinga	867	1,026	1,311	
Zomba	1,038	1,731	1,355	
Total	**10,868**		**19,534**	

10.5 Estimates from a Probability Sample of Women Interviewed at Busy Times

In PLACE II, the team visited a sample of 13 venues at a busy time in each district and conducted interviews with a probability sample of men and women working or socializing at the venue at a busy time. The team asked

questions of each of the women to determine if she engaged in commercial sex and/or self-identified as a female sex worker. Based on applying the sampling weights, the number of female sex workers in the district who visit the venue on a busy night can be estimated. The person's sampling weight was calculated as the inverse of: the probability that the venue was selected for a Form B venue visit times the probability that the venue was selected for a Form C interview times the probability that the person was sampled from those at the venue at the time.

The team also asked how frequently the person came to the venue. Based on the response the number of female sex workers likely to visit the venue over the course of a month can be estimated. People who reported visiting only once a month were given a higher weight than women who came every day. The team assumed that there were 12 busy days at a venue in a month. Someone who only visited once a month was given a weight of 12. Someone who visited every day was given a weight of 1. The person's sampling weight was calculated as the inverse of the probability that the venue was selected for a Form B venue visit times the probability that the venue was selected for a Form C interview times the probability that the person was sampled from those at the venue at the time. This sampling weight was multiplied times the "month factor" indicating how frequently the person visited the venue.

These estimates are not available for districts in PLACE I.

The main difference between these estimates and the estimates from the General Venue Informant is that these estimates come directly from a probability sample of female sex workers. The information from the General Venue Informant is based on his or her opinion of the number of sex workers at the venue.

Table 10.5 Estimated Number of FSW at Venues at A Busy Time and Over the Course of Four Weeks, Based on Direct Interviews with Women at a Sample of Venues (Approximately 13 venues per District), PLACE II Districts Only

	Female Pop. 18-49	FSW at Venues at Busy Time (Est #.)	Population (% of)	FSW at Venue Over the Course of Four Weeks (#)	Female Population (% of)
Central Region					
Dedza	150,347	516	0.3%	1,559	1.0%
Dowa	162,439	634	0.4%	768	0.5%
Kasungu	166,578	1,481	0.9%	1,918	1.2%
Mchinji	117,215	572	0.5%	576	0.5%
Nkhotakota	76,598	1,308	1.7%	1,330	1.7%
Ntcheu	114,895	1,194	1.0%	1,437	1.3%
Salima	86,841	1,959	2.3%	3,299	3.8%
Northern Region					
Nkhata Bay	57,228	772	1.3%	1,043	1.8%
Mzuzu	56,181		0.0%		

Karonga	70,068	868	1.2%	1,273	1.8%
Rumphi	44,107	383	0.9%	549	1.2%
Mzimba	188,554	1,758	0.9%	3,633	1.9%
Southern Region					
Balaka	82,053	356	0.4%	815	1.0%
Chikhwawa	108,127	858	0.8%	858	0.8%
Mwanza	21,771	767	3.5%	1,236	5.7%
Neno	35,727	281	0.8%	1,173	3.3%

The table below compares the estimate from the venue informant in Table 10.1 with the estimate from FSW survey above for PLACE II districts. Ten of the estimates from the probability sample were within the 95% confidence interval for the Venue Informant estimate. One of the estimates outside the confidence interval was lower; the rest were higher. The team prefers the direct estimates. They are reasonable and come directly from a probability sample.

Table 10.6 Comparison of Venue Informant Estimate and Estimate from a FSW Probability Sample: PLACE II Districts Only

	Probability Sample of FSW	Venue Informant Estimate			Probability Sample Within 95% CI
	Size Estimate	Size Estimate	95% CI Lower	95% CI Upper	
Dedza	516	760	608	912	No
Dowa	634	1,053	506	1,600	Yes
Kasungu	1,481	1,407	970	1,843	Yes
Mchinji	572	777	540	1,014	Yes
Nkhotakota	1,308	1,056	771	1,341	Yes
Ntcheu	1,194	556	413	699	No
Salima	1,959	2,542	616	4,467	Yes
Nkhata Bay	772	542	362	722	No
Karonga	868	926	724	1,129	Yes
Rumphi	383	488	372	603	Yes
Mzimba	1,758	671	441	901	No
Balaka	356	404	266	543	Yes
Chikhwawa	858	725	478	972	Yes
Mwanza	767	459	341	577	No
Neno	281	259	139	380	Yes

10.6 Rounded Estimates for FSW & Extrapolation to Districts without Data

Finally, each size estimate is rounded to remove the impression that the estimate is more precise than it is. The table below shows the rounded estimates. For PLACE I districts, the estimate is based on Table 10.1 from the

General Venue Informant. For PLACE II districts, the estimate is the busy time estimate based on the probability sample of interviews with FSW (without the four-week adjustment).

For districts where PLACE was not implemented, it was assumed that the percentage of women who were FSW would be low. The districts where PLACE was implemented were selected in part based on expected numbers of key populations in the district. Most of the districts that did not have a PLACE study were expected to have fewer FSW. Consequently, for all districts without PLACE data (except Thyolo and Mulanje), it was assumed that the percentage of women age 18-49 who are FSW was the mid-point of the lowest two district percentages reported in the region. For example, PLACE was not conducted in Ntchisi district. The two lowest percentages of the population estimated to be FSW were Dedza (0.3%) and Dowa (0.4%). It was assumed that the mid-point – 0.35% – of the women in Ntchisi were FSW.

In Thyolo District and Mulanje district, a different approach was used for extrapolation. The team initially planned to conduct PLACE in Thyolo and Mulanje but were prevented from implementation due to security concerns. The team calculated the average percentage of women in the 8 districts in the Region where PLACE I data or PLACE II data were available and assumed that the percentage in Thyolo and Mulanje reflected this average (1.25%). Other more sophisticated approaches to extrapolation are available but might not be necessary as all but 7 of the districts were covered and these districts were assumed to be districts without large FSW populations. The PLACE studies covered 83% of the population.

Table 10.7 Recommended Rounded Estimates for FSW

	Women in Sex Work (Est. %)	Female Population 2017 Age 18-49	Rounded Estimate
Central Region			
Dedza	0.30%	150,347	500
Dowa	0.40%	162,439	600
Kasungu	0.90%	166,578	1,500
Lilongwe	2.40%	293,533	7,000
Mchinji	0.50%	117,215	600
Nkhotakota	1.70%	76,598	1,300
Ntcheu	1.00%	114,895	1,100
Salima	2.30%	86,841	2,000
Ntchisi	0.35%	55,876	200
Regional Total			**14,800**
Northern Region			
Nkhata Bay	1.30%	57,228	700
Mzuzu	2.50%	56,181	1,400
Karonga	1.20%	70,068	800
Rumphi	0.90%	44,107	400
Mzimba	0.90%	188,554	1,700

	Women in Sex Work (Est. %)	Female Population 2017 Age 18-49	Rounded Estimate
Chitipa	0.9%	43,317	400
Regional Total			**5,400**
Southern Region			
Balaka	0.40%	82,053	300
Chikhwawa	0.80%	108,127	900
Mwanza	3.50%	21,771	800
Neno	0.80%	35,727	300
Blantyre	2.00%	308,466	6,200
Mangochi	0.40%	215,077	900
Machinga	0.80%	125,296	1,000
Zomba	1.30%	135,060	1,800
Chiradzulu	0.40%	66,094	300
Mulanje	1.25%	120,951	1,500
Nsanje	0.4%	56,359	200
Thyolo	1.25%	131,386	1,600
Phalombe	0.4%	76,944	300
Regional Total			**16,100**
National Total			**36,300**

10.7 MSM Size Estimates: PLACE I

For PLACE I districts, the size estimate for MSM is based on information from each General Venue Informant regarding whether the venue is a place that MSM visit as well as information from MSM about how many MSM visit the venue. The respondents, both the Venue Informant and the MSM person, were interviewed at the time of the Form B venue visit. It was sometimes difficult to find MSM to interview. Interviewers returned multiple times to the venue to reach MSM and worked with peer educators and members of the MSM community to recruit people to the venues.

Venue-based size estimates do not estimate the total number of MSM in a district. They do not include people who do not go to public venues. The estimate should be interpreted as the number of MSM who could be reached at venues.

In Malawi, there is substantial stigma regarding male-with-male sex. There are few clearly identified gay bars. Socializing and meeting new sexual partners may occur at public venues identified as places where people meet new sexual partners but it also occurs at private locations. The PLACE method does not map private locations for reasons of confidentiality and because the focus is on improving outreach to public places. For this study, the team asked MSM known to the interviewers and to the LINKAGES program to identify key persons in MSM networks who could facilitate meetings with MSM at public venues.

The first estimate was made from responses by the general Venue Informant to questions about whether MSM visit the venue. MSM interviewed at venues reported the min and max number at the venue at a busy time. The size estimate is the midpoint times the number of venues reported to have MSM. See Table 10.7 below.

Table 10.7 PLACE I Only. Size estimates based on MSM and General Venue Informants Interviewed at the Time of the Venue Visit

	Venues in District (#)	Venues with MSM (Est. #)	Max	Min	Midpoint	Midpoint * Number of Sites (Est.)
Lilongwe	993	209	16.5	11.4	13.95	2,916
Mzuzu	162	24	18.5	12.5	15.5	372
Blantyre	1,104	180	22.8	12.1	17.45	3,141
Mangochi	221	25	13.5	5.5	9.5	238
Machinga	248	15				0
Zomba	252	27	13.4	7	10	270

Interpretation:

These estimates should be validated by visits to the venues. The team has estimated for every venue that was visited and not visited the number of expected MSM at the venue as a general guide. The estimates are lower than previous estimates from other data sources. This could be explained by the reluctance of people to talk with the interviewers. On a positive note, the General Venue Informants were willing to report that MSM visit the site.

10.8 PLACE II MSM Size Estimates from a Probability Sample of Men Interviewed at Busy Times

In PLACE II, the same methods were used for estimating the size of MSM as for estimating the number of FSW. *Proc survey means* was used to estimate the number and confidence intervals, taking into account the survey design and clustering by venue. Many fewer MSM were interviewed in each district than FSW. Many districts included fewer than 20 interviews with MSM. Our target was 60 interviews with MSM per district. Consequently, the estimates are better for a larger area comprised of several districts rather than for each district separately.

Table 10.8 PLACE II Only: Size estimates based on Interviews with MSM

	MSM Interviewed (#)	Reached at Venues at A Busy Times (Est. #)	95% CL for Estimate		Reached at Venues Over 4 weeks (Est. #)	95% CL for 4-week Estimate	
Balaka*	14	54	9	98	425	0	1,014
Chikhwawa	86	689	514	864	1,445	631	2,258
Dedza	28	208	167	249	478	154	802
Dowa*	4	72	13	132	399	0	1,315
Kasungu*	18	82	-10	174	104	14	194
Mchinji*	8	29	2	56	148	0	417
Mwanza	25	35	16	54	87	0	186
Neno*	2	20	18	22	22	0	50
Nkhotakota	20	225	137	313	659	123	1,194
Ntcheu*	17	252	233	271	352	194	511
Salima	41	806	735	877	2,287	1,388	3,185
Karonga	42	129	81	176	510	180	839
Rumphi*	10	21	21	21	122	41	204
Mzimba*	2	57	57	57	164	0	1,532

*Indicates fewer than 20 MSM interviewed in the district.

11. Step 5: Data Use

For PLACE I, UNC staff communicated progress on an ongoing basis during implementation of PLACE. In addition, for PLACE I, Weir presented four updates in Lilongwe at each phase of data collection.

PLACE I and II datasets have been provided to some stakeholders. A fuller dissemination of the datasets, along with instructions on how to use them, will be provided during the national dissemination.

There are many ways that these data can be used to improve program outreach. UNC would welcome a data use workshop for additional dissemination of the data.

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APPENDICES

Appendix 1: Information Obtained with PLACE Form C
Appendix 2: Type of Community Informants by District
Appendix 3: District Entry Report
Appendix 4: PLACE I District Summaries
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Appendix 6: PLACE I Zomba Special Study
Appendix 7: FHI360 LINKAGES Site Validation Report 2017

Appendix 1 Information Obtained with PLACE Form C

Table Appendix 1 Information Obtained with Form C

Information Obtained with PLACE Form C	
Recruitment Information	
Method of identification of respondents	Whether recruited during Form B Visit or During Interviews at Busy Times
Informed consent	Type of venue
Willing to participate in interview, HIV test	Whether venue in a cluster
Language of interview	Whether recruited intentionally as MSM
Underlying Determinants / Sociodemographic Factors	
Age	District of residence
Sex/Gender	Where slept last night: Type of place
Educational attainment	When last spent night outside of district
Length of time in district of residence	Frequency of cell phone use
Employment	Frequency of social media use
Student Status	
Underlying Determinants: Vulnerabilities: Past 12 Months	
Hungry	Forced to have sex
Not enough money to support yourself	Treated poorly by health care worker
Victim of violence	Whether lives on venue and how long
Jailed or in prison	Whether works at site
Slept outside because homeless	Alcohol consumption
Physically hurt by police	
Underlying Determinant: Sex Work	
Ever paid money for sex (including men pay men for sex)	How many FSW do you know in district
Whether received money for sex in past 3 months	OF those, how many go out to venues
Age first received money for sex	Of those, how many come here
Condom use with most recent client	Of those how many here now
Underlying Determinant: Men having sex with men	
How many MSM do you know in district	Position

OF those, how many go out to venues	Condom use, lubricant use
Of those, how many come here	Number of male and female partners
Of those how many here now	
Underlying Determinants: Venue Visiting Behavior	
Number of venues visited night/day of interview	How many other places Sat night between 8 and 11
Frequency of attendance at this venue	Whether met new sex partner at venue
Before today when did you come here	Where else visited past week
Reason why came tonight	Age first received cash for sex
Did you come on Saturday night between 8 an d11 pm	Age first paid cash for sex
Proximate Determinants: Sexual Behavior	
Number of sexual partners in past 4 weeks	Age at first sex
Number of new partners in past 4 weeks	Condom use at last sex with anyone
Number of sexual partners past 12 months	Sex with men, women, last 12 months
Number of new sexual partners in the past 12 months	Receptive anal sex with a man in past 12 months
Number of transgender partners past 12 months	Anal sex with a man in past 3 months
Number partners met online or a phone app in the past 12 months	Anal sex without condom past 3 months
Penile vaginal sex past 3 months	Anal sex without lubricant past 3 months
Penile vaginal sex past 3 months without condom	Most frequent anal sex position past 3 months
Condom use at last sex with live-in partner	Condom intentions
Ever use male condom	
Other Proximate Determinants: Risk Behaviors	
Injected drugs in past 12 months, if so, whether shared a needle	Taken heroin, methamphetamine, ecstasy
Symptoms & Circumcision	
Discharge	Cough past 2 weeks, fever, night sweats, unexplained weight loss (TB symptoms)
Sores in genital area	Male circumcision
HIV Testing and Treatment	
Knows where to get HIV test	Begin taking HIV medicine (ARVs) (of those told have HIV)

Tested for HIV and received result	Currently taking ART
Ever been told you have HIV (of those tested)	Whether missed ART dose 3 or more times in past week
Ever taken ART	Where most recently obtained ART
Services Received	
STI screening	Peer education
TB sputum sample taken	Male Circumcision
Services for people who inject drugs	Risk reduction counseling
Condoms for free	Whether taken hormones for TR transition and who provided hormones
Personal lubricant for free	
Where Received Services	
Outreach worker / peer educator at venue	Drop-in Center
Radio	Health clinic
Biomarkers	
HIV	Viral Load (Zomba only)

Appendix 2 Type of Community Informants By District

Table Appendix 2 Type of Community Informants by District

Community Informants in Zomba (N=171)							
Business Person	25	Bicycle Operator	4	Community Leader	1	Shop Owner	1
Individual at Spot	14	Security Guard	3	Cook	1	Stone Breaker	1
Bar Worker	12	Welder	3	Hardware Seller	1	Store Clerk	1
Fisherman	12	Bar Owner	2	Housewife	1	Street Vendor	1
Youth in School	12	Bicycle Repair	2	Maize Mill Worker	1	Transporter	1
Barber	8	Butcher	2	Meat Seller	1	Youth	1
Trader	7	Carpenter	2	Mechanic	1		
Vendor	7	Curio Seller	2	Police Officer	1		
Hairdresser	6	Guard	2	Restaurant Owner	1		
Hawker	6	Phone Repair	2	Rest House Worker	1		
Student	5	Tailor	2	Secondary School Teacher	1		
Taxi Driver	5	Barbershop Owner	1	Sex Worker	1		
Youth Out of School	5	Boat Operator	1	Shoe Repair	1		

Community Informants in Lilongwe (N=940)							
Business Person	136	Bicycle Taxi Driver	12	Cleaner	3	Assistant Driver	1
Individual Socializing at Spot	76	Kabanza	12	Club DJ	3	Brick Trader	1
Trader	69	Community Leader	9	Driver	3	Bus Conductor	1
Taxi Driver	66	Farmer	9	Employed	3	Butcher Man	1
Hair Dresser	47	Shop Keeper	9	Other	3	CEDEP Stakeholder	1

Bar Worker	46	Mechanic	8	Restaurant Owner	3	Chibuku Seller	1
Guard	46	Carpenter	7	Assistant Manager	2	Chief	1
Youth in School	40	CBO/NGO	6	Bicycle Repair	2	Cobbra	1
Sex Worker	37	Community Health Worker	5	Bicycle Trader	2	Fuel Attendant	1
Unemployed	35	Welder	5	Chips Seller	2	Assistant Driver	1
Truck Driver	31	Barber	4	Minibus Driver	2	Brick Trader	1
Youth Out of School	28	Health Worker	4	Phone Repair	2	Bus Conductor	1
Bar Owner	24	Student	4	Sales Lady Airtel	2	Butcher Man	1
Hawker	24	Tailor	4	Technician	2	CEDEP Stakeholder	1
Vendor	21	No response	3	Unemployed Youth	2	Chibuku Seller	1
Motor Cycle Driver	16	Builder	3	Airtime Seller	1	Chief	1
Police	16	General Fitters	1	Housewife	1	Shop Assistant	1
Street Vendor	14	Photographer	1	Limbe Leaf Worker	1	Sign Writer	1
Military	1	Prison Warden	1	Machine Operator	1	Transgender Person	1
Nurse	1	Recording Artist	1	Maize Mill Owner	1	Wakabaza	1
Peer Educator	1	Resident	1	Maize Mill Worker	1	Worker	1

Community Informants in Mzuzu (N=156)							
Business Person	17	Unemployed	3	Pork Seller	1	Wine Trader	1
Taxi Driver	15	Employed	2	Saloonist	1	Working at a Maize Meal	1
Trader	13	Farmer	2	Security Guard	1	Casual Labor	1
Barber	10	Fuel Attendant	2	Shop Owner	1	Community Leader	1
Bar Worker	9	Mechanic	2	Truck Driver	1	Cooker at School	1
Sex Worker	8	Airtime Seller	1	Tire Seller	1	Driver	1
Hawker	7	Bar Manager	1	Vendor (Second Hand Clothes	1	Lecturer	1

Individual Socializing at Spot	7	Bicycle Repair	1	Video Librarian	1	Youth Out of School	4
Bicycle Taxi	6	Carpenter	1	Tailor	4	Chips Seller	3
Kabanza	6	Carwash Attendant	1	Youth in School	4		
Bar Owner	5	Motocyclist	1	Video/CD Business Seller	1		
Hair Dresser	3	Police Officer	1	Welder	1		

Community Informants in Machinga (N=122)							
Business Person	12	Hair Dresser	3	Youth in School	2	Motor Bike Taxi	1
Hawker	8	Shop Keeper	3	Airtime Seller	1	Rest House Owner	1
Trader	8	Tailor	3	Bamboo Seller	1	Rice Seller	1
Taxi Driver	7	Bar Worker	2	Bar Owner	1	Shop Worker	1
Youth Out of School	7	Bicycle Repairer	2	Bicycle Trader	1	Stationery	1
Bicycle Taxi	6	Community Police Chairman	2	Butcher Man	1	Teacher	1
Vendor	6	Farmer	2	Cleaner	1	Tinsmith	1
Individual Socializing at Spot	5	Fuel Attendant	2	Employed	1		
Unemployed	5	Kabaza	2	Group Village Headman	1		
Barber	4	Other	2	Health Worker	1		
Carpenter	4	Sex Worker	2	Laborer	1		
Fisherman	3	Welder	2	Mechanic	1		

Appendix 3: District Entry Report

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
23/05/17	Salima	Study was approved by DACC who will inform the DEC. DACC requested that findings should be presented at the DEC	How are you going to involve the district in the study? FPAM already works with KPs so you should just complement what FPAM is already doing The district needs capacity in research	Kamuzu road Kaphatenga Chigolo Chikombe Senga bay Salima Boma Chipoka Siyasiya Katelera Lifidzi Thavite Lifuwu Ngodzi Msangu All the fishing areas	FPAM CHRR Samala	The DACC meeting discussed and agreed that the mapping of KPs is important for their district They accepted this study to take place in the district
31/05/17	Dowa	Study was approved by DACC who will inform the DEC. DACC requested that findings should be presented at the DEC MAICC as a partner is interested to conducting the HIV testing during the study but they need to know about our	Why Dowa was chosen for this study? Is UNC going give incentives to key populations during the study?	Dzaleka refugee camp Support Batallion Mvera army Chezi market Mbalame CDSS Blantyre (Missi) Chimwaza Nambuma Madisi Chankhungu Lumbadzi Chuzu Mponela Nalunga Village Mbingwa Mwangala Msakambewa	MAICC	MAICC showed some willingness to support HIV testing and was asking for resources to do this Members thought this was an important study and encouraged UNC to share the findings with the District

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		schedule and if there are addition resources for the service Report to be presented at the DEC		Chiseko Kayembe Mtiti Mtambo		Executive Committee The committee welcomed the mapping of KPs in the district
01/06/17	Dedza	Study was approved by DACC who will inform the DEC. DACC requested that findings should be presented at the DEC People from the district wanted to know if there are MSMs in the district since CEDEP visited the district previously to introduce a program on MSMs which left of questions unanswered. HIV testing will be a problem in the district because most partners are not receiving	What strategies have you put in place to find the right information from community informants about MSMs since these people tend to hide since this practice is not accepted in the society What exact date the study is going to starting How accessible and confidential is the data you are about to collect? Why is transgender people included in the study?	Chimbiya Thete Dedza border Golomoti Ngoni culture Njonja Dedza Boma Mayani Bembeke Chiluzi Linthipe 1 Magomero Kabwazi Box 2 Biliati	FPAM Pakachere CEDEP MSF	MSF is another partner in the district but was not present at the meeting Discussion with the MSF Coordinator indicated that MSF would support testing in the districts where it works The committee welcomed the mapping of KPs in the district.

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		enough funds for the testing service and it's also a challenge to find testing kits in the districts.	How does data from previous study in the 6 districts reflect on MSMs? What language are the questionnaires?			
02/06/17	Kasungu	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC Partners such as FPAM were interested to take part but they are limited by the availability of resources such as test kits and allowances for their staff.	How are you going to handle the situation if someone is found HIV positive during testing that is if the service will be available? What is the methodology that will be used to identify the spots? How will we handle religious partners since the study will be done in awkward places and time? When is the study starting? Since the study will be happening at night what are the security	Santhe Chinkhoma Chamama Shayona Kasungu Boma Chatoloma Mtunthama Chisinga Nkhamenya Kamboni Bua	FPAM NAPHAM BLM Coalitiono f Women Living with HIV and AIDS (COWLHA)	The committee welcomed the mapping of KPs in the district

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
			arrangements put in place? How will the district benefit from the study after it comes to an end? How large is the study team since it seems there is much work to be done?			
05/06/17	Thyolo[3]	Study was approved by DACC who will inform the DEC DACC requested that a similar presentation be made at DEC DACC requested that findings should be presented at the DEC The members requested UNC to also attend the District Executive	State the main objective of the study? What's the sample size of the study? Will you provide services such as condoms during the study? How are we going to engage the police or DACC in the study?	Luchenza Bvumbwe Thyolo Boma Makwasa Goliati Thekerani Estates (pay days)	Pakachere NAPHAM	The committee welcomed the mapping of KPs in the district

[3] Though a district entry meeting was conducted for Thyolo, it was not possible to do mapping because of security concerns. Rumphi was substituted.

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		meeting (DEC) scheduled for the end of the month to answer any questions that could arise after the DACC presents this update HIV testing will be a problem in the district because most partners are not receiving enough funds for the testing service and it's also a challenge to find testing kits in the districts.	What should the district expect from the results of the research?			
05/06/17	Mulanje [4]	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC HIV testing will be a problem in the district because	How can partners assist in HIV testing? What strategies are in place to find and interact with MSMs?	Nkando Likhubula Chitakale Lauderdal Mathambi Mpala Chikuse Mpoliwa Limbuli Chonde Msika wa njala Chambo Mtombozi Kambeye	Dignitas Pakachere	The committee welcomed the mapping of KPs in the district

[4] Though a district entry meeting was conducted for Mulanje, it was not possible to do mapping because of security concerns. Mzimba was substituted.

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		most partners are not receiving enough funds for the testing service and it's also a challenge to find testing kits in the districts The DACC welcomed the study and it will update the District Executive meeting.		Mulanje Boma		
06/06/17	Chikwawa	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC The district as DHO really need the testing service so we should tell them in advance for them to make proper arrangements for the test kits	What's the core purpose of the study? Is Global fund funding all T/A in Chikwawa (was answered DHO representative) When is the study starting in Chikwawa?	Ngabu Nchalo Dyelatu Belewu Thabwa Chikwawa Boma Chapananga Nkhate Tsapa Misewu folo Kakoma Mitondo Masenjele Dembo	NAPHAM YONECO CDH	About the testing services other partners were not sure if they would be able to provide the services due to lack of resources The committee welcomed the mapping of KPs in the district
07/06/17	Mwanza	Study was approved by DACC	What criteria did you use for	Border Mwanza Boma	CARE MSF	Thanked UNC for bringing

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		who will inform the DEC DACC requested that findings should be presented at the DEC Partners at the meeting said that HIV testing will be a problem in the district because most partners are not receiving enough funds for the testing service and it's also a challenge to find testing kits in the districts Interview with FSW chairperson revealed that mapping is possible as due to its position, Mwanza has both FSW and MSMs.	choosing the social mobilizer and district liaison officer? Are the partners interested to conduct the testing service going to fund themselves? How many are in the study team based on the work we have? When will the study start in Mwanza?	ThambanI Ngadziwe Kunenekude Chabweza Chipatala area Mphete area Tulo nkhondo	DREAM PSI Pakachere	the study to the district. They pledged full support MSF is another partner in the district but was not present at the meeting. Discussion with the MSF Coordinator indicated that MSF would support testing in the districts where it works
08/06/17	Neno	Study was approved by DACC who will inform the DEC DACC requested that findings	How much money is coming to the district for this study? What exact date are you starting?	Zalewa Matope Neno Boma Luwani Ligowe Chifunga Kam'mwamba	MSF FPAM NICE COWLHA NWF	MSF is another partner in the district but was not present at the meeting.

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		should be presented at the DEC Partners at the meeting said that HIV testing will be a problem in the district because most partners are not receiving enough funds for the testing service and it's also a challenge to find testing kits in the districts. FSW chairperson indicated that mapping is possible in the district and her community (FSWs) is ready to support the team while in the district.		Kambale		Discussion with the MSF Coordinator indicated that MSF would support testing in the districts where it works MSF could provide names of hotspots for FSWs and GPS for the spots MSF visits hotspots every two weeks to provide HIV and FP services to FSWs The committee welcomed the mapping of KPs in the district
09/06/17	Balaka	Study was approved by DACC who will inform the DEC	What criteria was used to select CIs? Sometimes when interviewing sex	Balaka Boma Phalula Kankawo Senzani Chingeni Chiyenda usiku	Female sex workers Association NAPHAM	The committee welcomed the mapping of KPs in the district

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		DACC requested that findings should be presented at the DEC Positive steps, a newly founded NGO is willing to partner with UNC to provide HIV testing services. Positive steps works with KPs in the district	workers, they may demand incentives inform of money, how are you going to handle the situation? If someone doesn't want to participate in the study will they be given incentives i.e. condoms if the ask for? Are you going to meet the female sex workers association before interviewing the sex workers?	Ulongwe Mangochi turnoff Utale (1&2) Kwitanda Phimbi Kachenga Mbera Dziwe Mgomwa Mandumbo Mponda Nkaya Station Khwisa Mpale Mwima		
13/06/17	Karonga	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC Katchira organization which is under SAT is willing to	When doing the study are we going to include the key population in the team? What measures have we put in place in terms of security?	Uliwa Border Karonga Boma Chilumba Jetty Ngala Kapolo Fishing areas Lake shore areas Wiliro Moyengemo Sangaluka Mngandalusyala Mwakawana	FPAM CEDEP CHRR COWLHA FORUM NAPHAM Kachira under SAT Alliance for FSWs Livingstonia Synod Lusuwiro HBC	CHRR reported that there are about 41 MSMs in the district CHRR works with CEDEP Karonga has identified hotspots for FSWs where peer educators

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		partner with UNC to provide HIV testing services to KPs. FPAM works with FSWs in the district and uses MOH staff to provide HIV testing services to FSWs. To partner with UNC during the mapping exercise, they would need allowances for testers CHRR- welcomed the study to the district and that it will contribute a lot to the development of the district and that Karonga has a good number of MSMs and structures are already implemented in the districts which will make it very easy to identify them		Mwikifyeghe Iponga school Mlare Wovwe Lupembe Lughali Hara		distribute condoms and refer FSWs with health problems to the hospital The committee welcomed the mapping of KPs in the district

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
14/06/17	Nkhata-bay	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC HIV testing will be a problem in the district because most partners are not receiving enough funds for the testing service and it's also a challenge to find testing kits in the districts	Asked if the study sample is too low? Other partners they only focus in the urban areas so is our study covering both urban and rural areas?	Nkhatabay Boma Kande Chintheche Mpamba Usisya Tukombo Malaza Kavuzi	Pakachere CEDEP YONECO	The committee welcomed the mapping of KPs in the district
15/06/17	Nkhota-kota	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC HIV testing will be a problem in the district because most partners are not receiving	Apart from CEDEP what other partners is UNC working with? In your study you are targeting public places. What measures have you put in place to capture women working from their homes?	Nkhotakota Boma Dwambazi Ngala Dwangwa (trading centre) Mtupi Dwangwa Matiki (factory area) Mtupi Senjere Liwaladzi Lozi Nkuzira Chiganga	Pakachere CEDECP NASO (nkhotakota Aids support Organisation) FOCCAD works with FSWs. Provides door to door HIV testing	The committee welcomed the mapping of KPs in the district

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		enough funds for the testing service and it's also a challenge to find testing kits in the districts	What is the budget for Nkhotakota since we are working in 15 districts? Will the researchers conducting the study be students or staff from UNC? When is the study starting in the district? Any criteria used to select the 15 districts? Based on the previous study can you share with us how useful were the results to the districts in which it was conducted?	Kaliba Kalimanjira Abuja Chiya Mwansambo Nkhomo Mpamantha Nkaika Benga Mwadzama-Ntosa BVyobvyo Bauti Katengeza	and visits FSWs every 2 weeks	
21/06/17	Mchinji	Study was approved by DACC who will inform the DEC DACC requested that findings should be	How long will the study take? How are we going to identify the MSMs from the district?	Mchinji Boma Kamwendo Border Kapili Waliranji Mkanda Kwagubudu Mkhwazi	NAPHAM FPAM Action aid	The committee welcomed the mapping of KPs in the district

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
		presented at the DEC Partners who were present at the meeting they don't provide testing services in their programs		Kwamwenda Mikundi Tembwe (trading centre) Vigoba Nthema (kumbulu)		
22/06/17	Ntcheu	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC FPAM is interested to join the team in providing the testing service since they are also conducting same exercise which they call it moonlight in the district but we need to communicate and coordinate on how to handle the issue.	How are going to involve the police in our study? Is the exercise going to cover the whole district or only specific hotspot areas? Which other districts will the study be conducted and why did we choose Ntcheu to be among them? Are public institutions such as university and secondary schools included in the study? What is the main purpose of the findings we get from the study?	Ntcheu Boma Lizulu Tsagano Turn off Senzani Balaka market Kampepuza Manjawira Kansinje Pengapenga Sharpe valley Kambironjo Doviko Mphepo zinai Kandeu Bwanje Tsangano proper	FPAM	They appreciate the protocol we have used to first have a meeting with the DACC before conducting the study in the district and that will have full support from them The committee welcomed the mapping of KPs in the district. Meeting with 1 MSM and 1 FSW

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
			They were other similar studies conducted in previous years about the same key populations, how do we link them with this present study?			
28/08/17	Rumphi	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC	When are you going to start data collection How much of the budget is coming to the district	Rumphi boma Bolero Mwazisi Katowo Phwezi Mchenga coal mine Chiweta Mlowe Chitimba Livingstonia Lura Mhuju Tchalo Mphompha Bunga Kamphenda Thazima Luviri Matunkha Bowe Chilinda Nkhozo Buwira Bondi Chikwawa Zolokera Mzokoto	LICO	All questions were responded to and everyone was satisfied

Date	District	Approval / Discussion	Questions/issues raised	PPAs	Partners	Comments
				Chinyoro		
29/08/17	Mzimba	Study was approved by DACC who will inform the DEC DACC requested that findings should be presented at the DEC	How are you going to involve partners in the district? How will the district be involved?	Enukweni Luzi Bwengu Ezondweni Engucini Mphelembe Kafukule Euthini Mbalachanda Madede Muzalagwe Eswazini Endigeni Embangweni Mqocha Jenda Raiply Mzimba Boma Luwawa Enfeni Manyamula Bulala Mbawa Lake kazuni Dendela Mawiri Kazomba	CDC Elizabeth Glaser Foundation MACRO	Elizabeth Glaser Foundation willing to support HIV testing for KPs in the district

Questions/Issues raised and responses given

Questions/issues raised	Responses provided
▪ Why Dowa was chosen for this study? ▪ Is UNC going give incentives to key populations during the study?	▪ Dowa was chosen by the Ministry of Health as one of the districts supported by the Global Fund ▪ UNC is working in collaboration with CEDEP on this study. CEDEP will provide lubricants and condoms to key populations upon request.

Questions/issues raised	Responses provided
▪ What strategies have you put in place to find the right information from community informants about MSMs since these people tend to hide since this practice is not accepted in the society ▪ What exact date the study is going to starting ▪ How accessible and confidential is the data you are about to collect? ▪ Why is transgender people included in the study? ▪ How does data from previous study in the 6 districts reflect on MSMs? ▪ What language are the questionnaires?	▪ The community informants will tell us whether a spot is patronized by MSMs or not. We will ask MSMs themselves about details related to MSMs. Since we are working with CEDEP who are working with MSMs in Malawi, we hope it would be easier to identify and talk to MSMs during the study. ▪ As we are still conducting districts entry meetings, we are not sure about the exact date we will be coming to the district for data collection. Once we are aware of the dates, we will communicate to the DAC one week before we come. ▪ Transgender people are included because they are also not accepted in our society and may also have challenges accessing health services in our hospitals ▪ The report from the previous study was prepared but is not available for public consumption. The questionnaires have been translated from English to all the major local languages in Malawi such as Tumbuka, Chichewa and Yao.
▪ How are you going to handle the situation if someone is found HIV positive during testing that is if the service will be available? ▪ What is the methodology that will be used to identify the spots? ▪ How will we handle religious partners since the study will be done in awkward places and time? ▪ When is the study starting? ▪ Since the study will be happening at night what are the security arrangements put in place? ▪ How will the district benefit from the study after it comes to an end? ▪ How large is the study team since it seems there is much work to be done?	▪ Testing will be done by experienced Ministry of health counselors. All results will be treated with confidentiality. Those found HIV positive will be referred for ART ▪ We will use the place methodology whereby we will ask community informants in the districts to tell us places they know ehere people meet new sexual partners etc ▪ As for religious partners, they will not be involved in the actual data collection so they will not accompany research assistants to the sites ▪ Its good that we have representation from the police at this meeting. We believe that that this information will be shared with the Officer in Charge and other officers. Also when we arrive in the district, we will pay a courtesy visit to the police to let them know we are here. It is our expectation that the police will assist us as they do with any other Malawi citizen should we

Questions/issues raised	Responses provided
	encounter anything that would require their services
▪ State the objective of the study? ▪ What's the sample size of the study? ▪ Will you provide services such as condoms during the study? ▪ How are we going to engage the police or DACC in the study? ▪ What should the district expect from the results of the research?	▪ The objectives of this study are: with services (programmatic mapping). ▪ To estimate the sizes of key populations (and important sub-groups) in selected areas ▪ To identify gaps in service delivery locations in each selected area. ▪ To use the results for action planning to improve services for key populations. ▪ Optional for districts: To estimate the prevalence of HIV among key populations and estimate the HIV prevention and treatment cascade (Note that this requires additional funding and support in a district and is not included in the funded study, but could be accommodated with additional funding at the district level.) ▪ Depending on the size of the district, we have calculated the sample size of key populations according to the size of the district but we will interview between 112 and 200 community informants in each district. This also depends on the size of the district with smaller district having 112, medium districts 150 and big districts 200. ▪ UNC is working in collaboration with CEDEP on this study. CEDEP will provide lubricants and condoms to key populations upon request. ▪ When we arrive in the district, we will pay a courtesy visit to the police to let them know we are here. It is our expectation that the police will assist us as they do with any other Malawi citizen should we encounter anything that would require their services The districts should expect to receive district specific results that show the size estimates of key populations, where they are found and the gap in health/HIV services for these people. The district will use these results for programming HIV services for key populations

Questions/issues raised	Responses provided
▪ How can partners assist in HIV testing? ▪ What strategies are in place to find and interact with MSMs?	▪ Partners will need to provide resources such as test kits, transport and personnel that will do the testing ▪ Since we are working with CEDEP who are working with MSMs in Malawi, we hope it would be easier to identify and talk to MSMs during the study.
▪ What's the core purpose of the study? ▪ Is Global fund funding all T/A in Chikwawa (was answered by DHO representative) ▪ When is the study starting in Chikwawa?	▪ The core purpose of the study is to provide actionable evidence of gaps in HIV prevention and treatment programs among key populations (defined as populations most likely to acquire and transmit HIV) at the local level and evidence-based strategies to address the gaps in service coverage. ▪ Yes all TAs in Chikwawa district ▪ As soon as we finish doing these meetings in all the districts, we will come up with a schedule and the date of visit for Chikwawa district will be communicated to the DAC
▪ What criteria did you use for choosing the social mobilizer and district liaison officer? ▪ Are the partners interested to conduct the testing service going to fund themselves? ▪ How many are in the study team based on the work we have? ▪ When will the study start in Mwanza?	▪ We would like to have a District liaison officer who is familiar with the district to help us locate places and remove duplications and a social mobilser to help us work with Female sex workers and MSMs. UNC will not choose these people but will rely on the DACC to choose the right people. We have our expectations which we have already discussed with all of you. ▪ Yes, the partners are expected to fund themselves as this activity was not budgeted for in this study ▪ As soon as we finish doing these meetings in all the districts, we will come up with a schedule and the date of visit for Mwanza district will be communicated to the DAC
▪ How much money is coming to the district for this study? ▪ What exact date are you starting?	▪ The districts will not get any funds for the study ▪ As soon as we finish doing these meetings in all the districts, we will come up with a schedule and the date of visit for the districts will be communicated to the DAC

Questions/issues raised	Responses provided
▪ What criteria was used to select CIs? ▪ Sometimes when interviewing sex workers, they may demand incentives inform of money, how are you going to handle the situation? ▪ If someone doesn't want to participate in the study will they be given incentives i.e. condoms if the ask for? ▪ Are you going to meet the female sex workers association before interviewing the sex workers?	▪ In this study, we will not give any incentives in form of money. However, we will give condoms and lubricants upon request ▪ Yes. If someone requests for condoms but does not participate in the study, we will provide the condoms ▪ No. we will not meet with sex workers association. However, we will meet with the representative who will help us as a social mobiliser during the study
▪ When doing the study are we going to include the key population in the team? ▪ What measures have we put in place in terms of security?	We will include key populations either as study participants or social mobilisers. We will not involve them for data collection because there are research assistants who have been trained to do this job
▪ Asked if the study sample is too low? Other partners they only focus in the urban areas so is your study covering both urban and rural areas?	▪ The study sample is adequate. Calculations using district sizes were made to come up with sample size for each district ▪ Our study will cover the whole district – both rural and urban areas
▪ Apart from CEDEP what other partners is UNC working with? ▪ In your study you are targeting public places. What measures have you put in place to capture women working from their homes? ▪ What is the budget for Nkhotakota since we are working in 15 districts? ▪ Will the researchers conducting the study be students or staff from UNC? ▪ When is the study starting in the district? ▪ Any criteria used to select the 15 districts? ▪ Based on the previous study can you share with us how useful were the results to the districts in which it was conducted?	▪ We are also working with the National AIDS Commission ▪ We hope to meet these women if they happen to go to the spots we will be working in. Otherwise, we will not visit private homes ▪ Yes, we have a specific budget for Nkhotakota district just like any other district. Unfortunately, we do not have the figures with us here ▪ The researchers are staff from UNC ▪ The findings from the previous study are ready. However, they are not yet available for public consumption
▪ How long will the study take? ▪ How are we going to identify the MSMs from the district?	▪ In each district the study will take approximately 15 days. However, the whole study is scheduled to complete in four months ▪ We are working with CEDEP and with their help, we will be able to link up with peer educators and stakeholders already working in the districts.

Questions/issues raised	Responses provided
▪ How are you going to involve the police in our study? ▪ Is the exercise going to cover the whole district or only specific hotspot areas? ▪ Which other districts will the study be conducted and why did we choose Ntcheu to be among them? ▪ Are public institutions such as university and secondary schools included in the study? ▪ What is the main purpose of the findings we get from the study? ▪ They were other similar studies conducted in previous years about the same key populations, how do we link them with this present study?	▪ The study will cover the whole district ▪ The study will also be conducted in Dedza, Dowa, Mchinji, Kasungu, Nkhotakota, Karonga, Nkhatabay, Balaka, Mwanza, Neno, Mulanje, Thyolo, Chikwawa and Salima. ▪ Public institutions such as universities and secondary schools may be included in the study if mentioned by key populations as places where people meet new sexual partners ▪ The findings will be used by both the government at national level and districts for programming of HIV services for key populations ▪ We have been in touch with others who have done similar studies and we will review their report as well. However, we are using a different approach and we hope to get findings that will complement what others already found.
▪ How are you going to involve the district in the study? ▪ FPAM already works with KPs so you should just complement what FPAM is already doing ▪ The district needs capacity in research	

HIV Testing support availability

District	Partner
Karonga	Katchira under SAT
Ntcheu	FPAM
Dedza	MSF
Neno	MSF
Mwanza	MSF
Balaka	Positive Steps

Participant list

NO	NAME	ORGANISATION	DESIGNATION	CONTACT NO
BALAKA				
1	Kumbeni Gomile	Goal Malawi	Area Manager	
2	Reuben Majija	NAPHAM	Care taker	
3	Yusuf Murray	B.D.C	Grants officer	
4	Judith banda	Chinansi	Field officer	
5	Tamandani Ntepa	Social welfare	SSSO	
6	Kenie Zintande	Youth representative	Chair	
7	Promise Kaliwambe	DYO	YTSC Member	
8	Lauis Kumchima	DIO	Information	
9	Duncan Mapwesera	Azitona. DEV.SER.	Operation Director	
10	Edwin Gravel	Police	HIV/AIDS Coord.	
11	Pastor A.R.B Natulu	DIAC	Chairperson	
12	Davis Konondo	BDC	SNHAO	
13	Ruth Khadija	Tingathe	Member	
14	Clement Chiwala	Positive Step	ED	
15	Ishmael Kabongwe	BDC	Messenger	
16	Precious Kachale	BDC	O/A	
CHIKWAWA				
1	Gladys Fatch	NAPHAM	D.coordinator	
2	Titha Dziyo	Police	AIDs coordinator	
3	Patrick Makonde	YONECO	Project Officer	
4	Oliver Kadondo	Judiciary	Comm.s.officer	
5	Patrick baluwa	CDH	Vmmc coordinator	
6	Lusayo Malanga	CK DHO	Project coordinator	
7	Michael chigalu	One community	CPO	
8	Paul chigalukire	CDH	Cleaner	
MCHINJI				
1	Lyson Tasauka	labour	Labour officer	
2	Goodwel Ngombe	PLWH	Chairman	
3	Loveness chinkango	NAPHAM	Caretaker	
4	Lilian Thomas	Forestry	admistration	
5	Francis zulu	Mudziwathu radio	Market manager	

6	Pickford manyungwa	Mchinji DC	Chief administrationofc	
7	Fanny mwambumba	Judiciary	CO	
8	Moses phiri	Council	Messenger	
MULANJE				
1	Vestina kampajo	EPM	Health administrator	
2	Asimenye fweta	Labor	Senior labor assistant	
3	Charles mphayo	Youth	DYO	
4	Robert sawiche	Social welfare	DSWO	
5	Ibrahim bokosi	District interfaith	Mulanje District	
6	Salim phiri	Dignitas international	Team leader	
7	Charles lomoni	Mulanje district	SNHAO	
8	Annie sekani	GAIA	PO	
9	Monica katuli	MJ DHO	SEN/m	
10	Priscilla nankwawa	MJ DHO	ART coordinator	
11	Peter kandiwo	DC	MISO	
12	Mafunga jamu	DC	Community development	
13	Rita Rino	Sports	DSO	
NENO				
1	Macley mtekateka	Social welfare	Social welfare	
2	Biston threemunthu	Dacc member	member	
3	Atness mbeta	Dacc member	member	
4	Eleneo kalemera	DIH DACC	cpo	
5	Cecelia khanje	Msf	C H W	
6	Fuuny kapira	District council	DAC	
7	Joyce Stefano rozario	FPAM	ADM	
8	Esther chigada	NWF	Member	
9	Moses chimwera	DACC	Chair	
10	Elizabeth chilimampunga	COWLHA	District coordinator	
11	Fainala phiri	MOH	ATR coordinator	
12	Wallace kudzala	NICE	DCEO	
13	Gideon mkhumbwa	Sports	DSO	
14	John chidothi	DC	Messenger	
15	Patrick sande	DACC	Member	
16	Mecca kamanga	DACC	Member	N/A

17	Mayeso mpaso	MSF	Ps supervisor	
THYOLO				
1	Vonkey phakamisa	NICE	ADCEO	
2	Caleb pemba	CRECCOM	SPO	
3	G.L hayaya	Labour	L.A	
4	Maggie Meya	Community development	CDO	
5	Martha mkusi	Social welfare	SWA	
6	Elufe kabisala	Police	HIV/AIDS coordinator	
7	Davis kavalo	District council	SNHAO	
8	Mc Donald mwalwanda	NAPHAM	Caretaker	
9	Willard mwambo	TAYO	ED-TAYO	
10	Liana chapota	PAKACHERE	Project manager	
11	Tiyesi pulundwe	prison	Health care	
12	Andrew chamdula	Thyolo hospital	HIV/AIDS coordinator	
13	Thende musopole	pakachere	driver	
14	Sam ganda	DC	messenger	
DEDZA				
1	David chikwanje	DDC	SHNAO	
2	Ian Chigamba	CEYCA	Project officer	
3	Norah Brown	Youth	Intern	
4	Deborah Maonga	Labour	L.A	
5	Maxwell Mawera	CYECE	Project Officer	
6	Esther Kampata	Prison	HIV coordinator	
7	Yamikani sabola	Information	DIO	
8	Janet Makawa	DDC	DSO	
9	James Buleya	Youth	Intern	
10	Richard Mtengula	Police	AIDs Coordinator	
11	Godfrey Buleya	Judiciary	Administrator	
12	Pastor clement Phiri	DAC	Chair	
13	Rev. Dr.G.A. Kachale	KACO	Ex. director	
14	Ashraf Saidi	Agriculture	Agresso	
15	Horrace Tebulo	Bemebeke FM	Reporter	
16	Ephraim Makwiza	DDC	Office Assistant	
17	Chimwemwe kalyosi	DDC	Office Assistant	
DOWA				
1	Peter Samute	Dowa RDP	AGRESSO	

2	Annie	District council	Librarian	
3	George Kaunda	MAICC	Program Manager	
4	Benson Manda	Youth	Youth REP	
5	Edward phiri	PAC	Member of DCT	
6	Anderson Massa	DEPLA	Coordinator	
7	Frank Damalekani	Social	DSWO	
8	Billy A.Maupa	MACOHA	Project supervisor	
9	Christina Kaleya	Water	AHRMO	
10	Tiyanjane N Mambucha	Information	DIO	
11	Chikondi Mwitha	Health	Deputy HTC coordinator	
12	Florence zgamba	POLICE	NUT	
13	Francis Sindura	Fisheries	DFO	
14	Jackson Manda	Irrigation	DIE/DIO	
NKHATABAY				
1	Ranoolp Maseya	MCH-NB-DHO	Logistics Manager	
2	M. Madakiwa	Judiciary	Accounts	
3	Cleanwell Phiri	Social welfare	Child Protection	
4	Collings Mkandawire	Labour	LA	
5	Stanly Zawanda	Information	DIO Rep	
6	Charles Makaniko	Council	Messenger	
7	Prisca Zumbaa	Social welfare	DSWO	
8	Juliet Simbeye	GENET	F.O	
9	Babora chia	Council	Messenger	
10	Richard chirwa	DIAC	Chairperson	
11	Cardinal Kamija	FBO	D/chair	
12	Benson bendala	Prison	AIDS coordinator	
13	Esther Munthali	P.E	Chair person	
14	Joshua Nyirenda	MOH	HTS coordinator	
15	Dunreek ponde	YONECO	D/coordinator	
16	Yamikani mulore	MOH	ART coordinator	
17	Gift kaliza	Council	SNHO	
18	Tamara Gausi	Council	Grants officer	
19	Henry missie	Police	AIDS coordinator	
20	Ellen mhone	Mtisunge	E.director	
21	Joseph Manda	DC	O.A	
NKHOTAKOTA				
1	Mcelloe Mhone	labour	DLO	
2	Emma Zedi	Prison	HTS Counselor	

3	Thoko Zulu	KK radio	Reporter	
4	Sheminah nkhoma	Zodiac	Reporter	
5	Henry.D. Ngalande	Education	DEM Rep	
6	Bonface Kalima	Judiciary	SCO	
7	Piyo Gregory Dimba	St Annes	Senior Nursing Officer	
8	Cosmas Meja	Prison	HTS coordinator	
9	Jimmy Kamwendo	FOCCAD	DACC chair	
10	Chance Mwakilama	NYO	Instructor	
11	Jaffar Ibadillah	DIAC	Chair	
12	Goodwel kalimanjira	Social Welfare	DACC member	
13	Blessing Marley	Sports	DSO	
14	John Banda	NICE	Office assistant	
15	Denisi Mbera	District Council	Messenger	
16	Luka Manjonda	NICE	O.A	
KARONGA				
1	Steve Ndau	KDC	SNHAO	
2	Thumbiko Munthali	KDH	HIV/AIDS Coordnator	
3	Sanderson Nyambani	Prison	SAC	
4	Asimenye Kaira	NAPHAM	Care taker	
5	Grecian Mbewe	CHRR	Coordinator	
6	Queen Kaira	COWLHA	Coordinator	
7	Mary M'bama	LISAP	Project officer	
8	Zikonjani Chikumbu	Agriculture	Crops Officer	
9	Cosmas Chimaliro	Information	DIO	
10	Melody Mkubwa	KDC	Trainner	
11	John Kaluwa	Council	O/A	
12	Josophine Kanjere	HBC	Lusibiro	
13	Jane Mbowe	Kachira	Project coordinator	
14	Jassie Nyausegha	Women forum	Financial	
15	Arther Boza	FPAM	CRFP	
16	Austin Komuk	Youth	DYO	
17	Mathias Hauli	O/A	KDC	
18	Chikondi Kadzenja	NRWB	IT officer	
19	Goldman Mwasangoko	FOCUS	M & E officer	
20	Paxten Nantchegwa	Police		
21	Ensom Kayane	Labour	ALO	

22	Milward Chanza	FOCUS	Project coordinator	
23	Lilly Mlesha	KDC	Cleaner	
24	Phalesi Kawanga	KDC	DRO	
KASUNGU				
1	Raphel khazingo	Police	Coordinator	
2	Billie Msokera	NAPHAM	Care taker	
3	Enock maulanda	KU DHO	HTS coordinator	
4	Rhodiney Chaula	DHO	YFHS coordinator	
5	Gladys Manyenje	DHO	Matron	
6	Vincent Khonje	Information	DIO	
7	Luius Njovu	KU DC	DACC	
8	Brenda Jalie	DIAC	Membere	
9	Robert Ng'oma	FPAM	District Manager	
10	Dickson Mbewe	DHO	HTS Supervisor	
11	Idah Katida	COWHLA	CHAIR	
12	Loveness Banda	BLM	HTS Counsellor	
13	Wellington Mmora	DC	MISO	
14	Shadreck Jere	social	SWA	
15	Joel Mafuta	CBO Nertwork	Chair	
16	Myson Tenson	KU MC	Messenger	
MWANZA				
1	Nathan Undulu	Information	DIO	
2	Mariana Misi	Youth Office	DYO Assistance	
3	Edith Kachulu	COWLHA	HIV Rep…	
4	Mary Lichakala	Prison	HIV Coordinator	
5	Collings Nomwa	DHO	HIV coord..	
6	Edward Tidyenji	CBO Nertwork	Secretary	
7	Mecca kamaye	WOLREE	P. Coordinator	
8	Temica Mhangho	CHREAA	paralegal	
9	David Samikwa	TIKAYO	P. Coordinator	
10	Zaid Mzima	Social worker	SWA	
11	Emmanuel Brown	education	SHN cord…	
12	Dan Khunga	Immigration	HIV Coord…	
13	Alese Chang'ani	Police	HIV Coordinator	
14	Sthart Maganizo	Youth Nertwork	Chair	
15	Phillip Mponda	DC	Ag. DACC	
16	Hanna Nyanga	Umodzi	Chair	
17	Edgar Chihana	MNDC	Ag. DPD	

18	Samson Suman	DC DO	Driver	
19	Lemon Makanjira	MNDC	Dg. PUA	
20	Staniley Gunden	Social	SWA	
NTCHEU				
1	John Kathengera	Forest	PLHIV	
2	Clement Mwanga	PLHIV.Rep	Chair	
3	Glory Mkandawire	Hunger Project	Project officer	
4	John Nkhoma	Police	O/C	
5	Mike. P. Makalande	Soua/weefue	DSWO	
6	Mathero Kambalame	NUDC	AG> DACC	
7	Richard Nchonjera	YONECO	Project officer	
8	Hestern Jamali	Agriculture	Planting	
9	CRJ Makhanga	Judiciary	DCA	
10	Limbikani semu	MoH	STI Coordinator	
11	Carlo Zamadunga	Uncle B	Sex Worker	
12	Martha Mitambo	FPAM	Nurse	
13	Victor Chinsakasa	Everest bar	Youth	
14	Joseph Chimwala	MoH	HTS Coordinator	
15	George P. Bulambola	Information	DIO	
16	Abubaker Nuhoine	NU DC	DPD	
17	Anderson Mwale	Youth- NU	DYO	
18	Alfeo Sandram	Prison	Representative	
19	Moffat Litchapa	DIAC	DACC Chair	
20	Peter Mtambo	OPC	DIO	
21	M. F. Mwakayoka	Labour	Lo	

Appendix 4: PLACE I District Summaries

Blantyre, Malawi

Weir SS, Bula A, Lancaster K, Herce M

Fieldwork summary

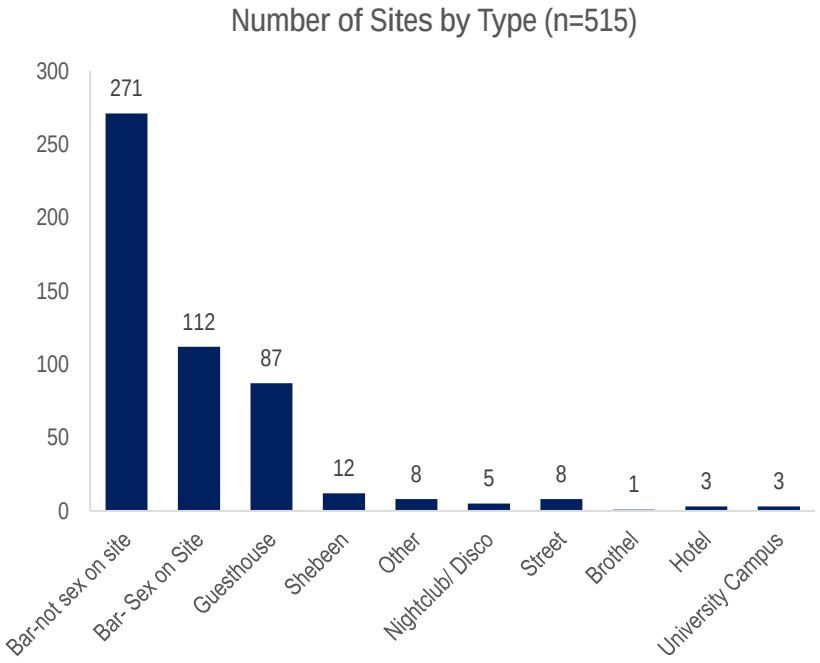
700 community informants interviewed

1104 sites estimated

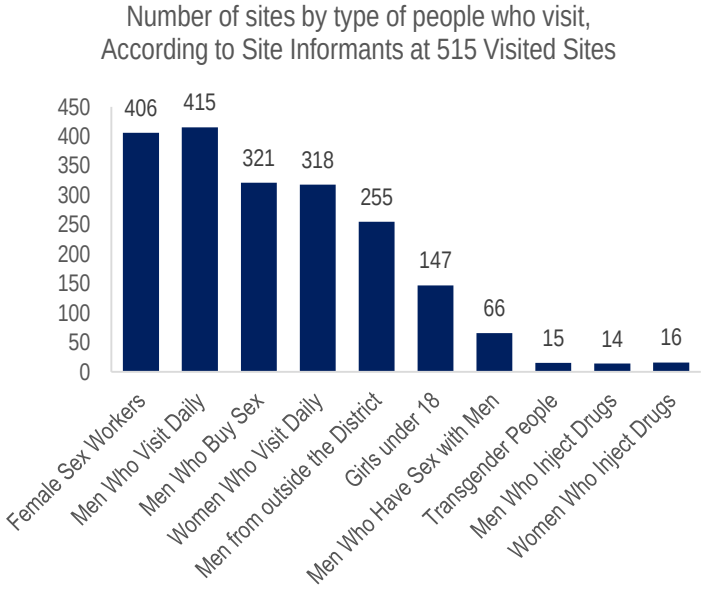
515 sites visited

515 general site informants interviewed

353 FSW & 84 MSM site informants interviewed



Who can be reached at PLACE Sites?



Population size estimate (n=1,104)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	4,867	2,178
High estimate	7,532	4,104
Point estimate	6,200	3,141
Rounded	6,000	3,000
% of Women 15-49	2.0%	-----
% of Men 15-49	-----	< 1%

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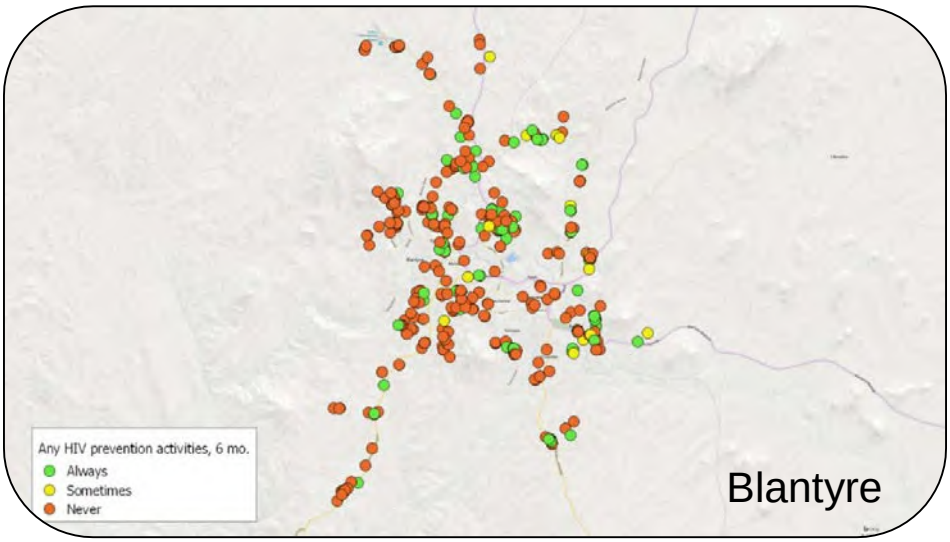
Prevention services at 515 Visited Sites



Number of Sites with Prevention Services

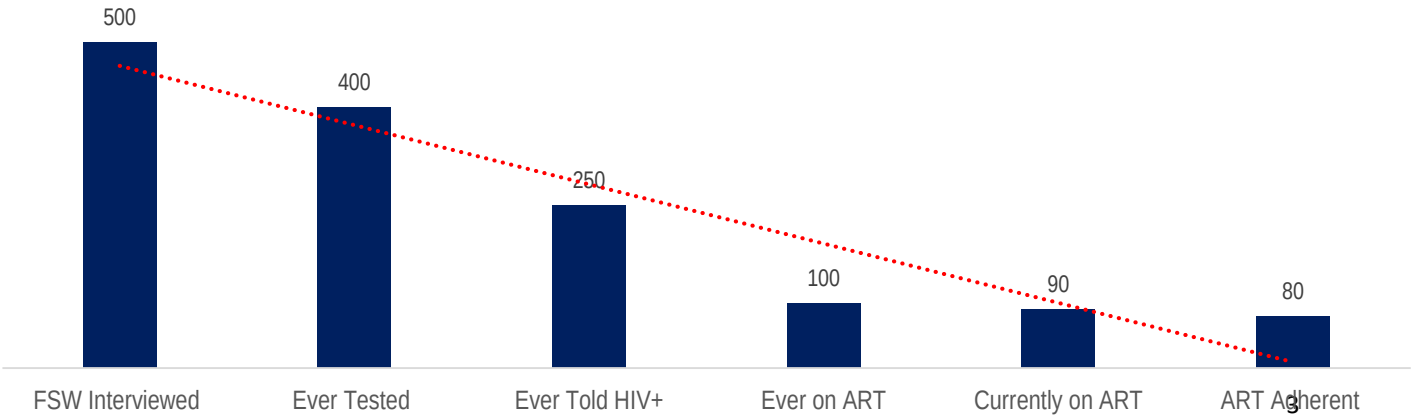
238 Condoms Visible at Time of Visit	**44** Peer Educators Visited (6 Mo)
28 Onsite HIV Testing	**10** Lube Always There

Number of Sites by Number of Services

259 Any Services	**53** Any 2 Services
15 Any 3 Services	**3** Any 4 Services

Self-reported cascade for female sex workers

Updated cascade for FSW interviewed during PLACE Form B



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Mzuzu, Malawi

Weir SS, Lancaster K, Ewing W, Bula A, Herce M

Fieldwork summary

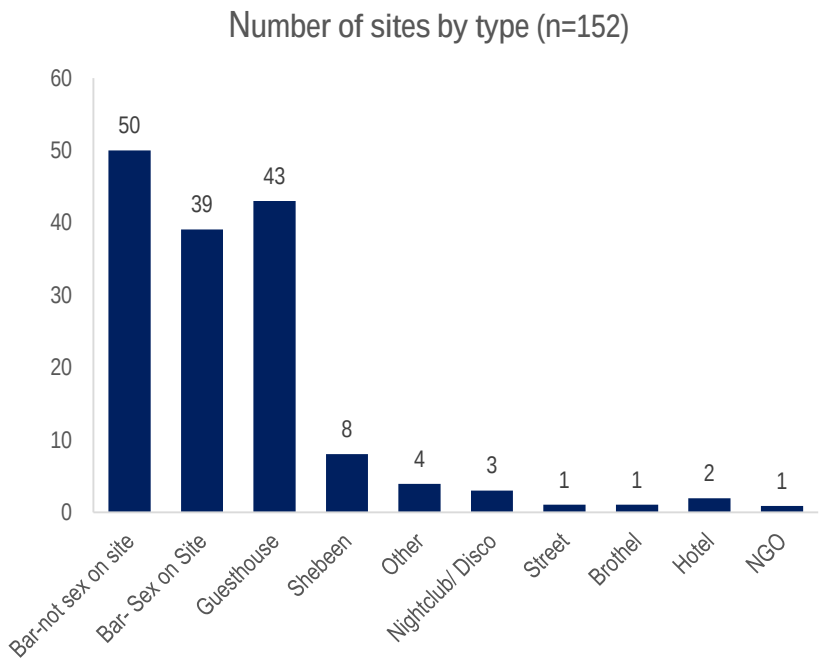
156 community informants interviewed

162 sites estimated

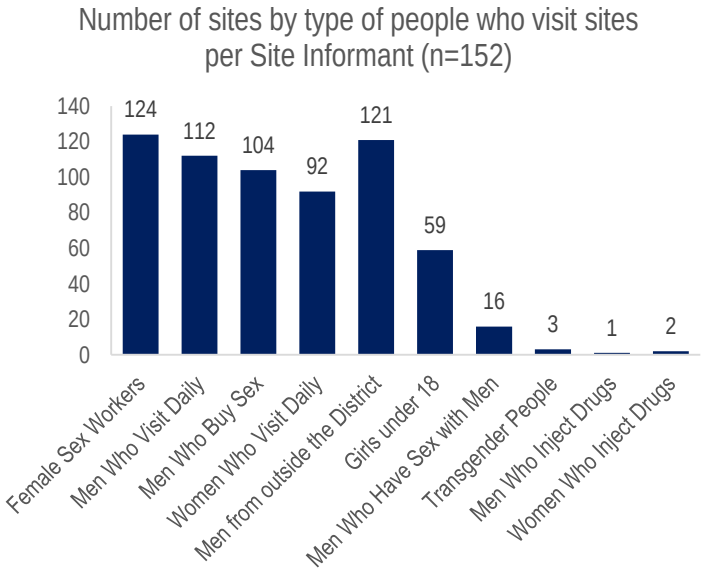
152 sites visited

152 general site informants interviewed

105 FSW & 19 MSM site informants interviewed



Who can be reached at PLACE Sites?



Population size estimate (n=162)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	905	300
High estimate	1,932	372
Point estimate	1,419	444
Rounded	1,000	400
% of Women 18-49	2.5%	-----
% of Men 15-49	-----	<1%

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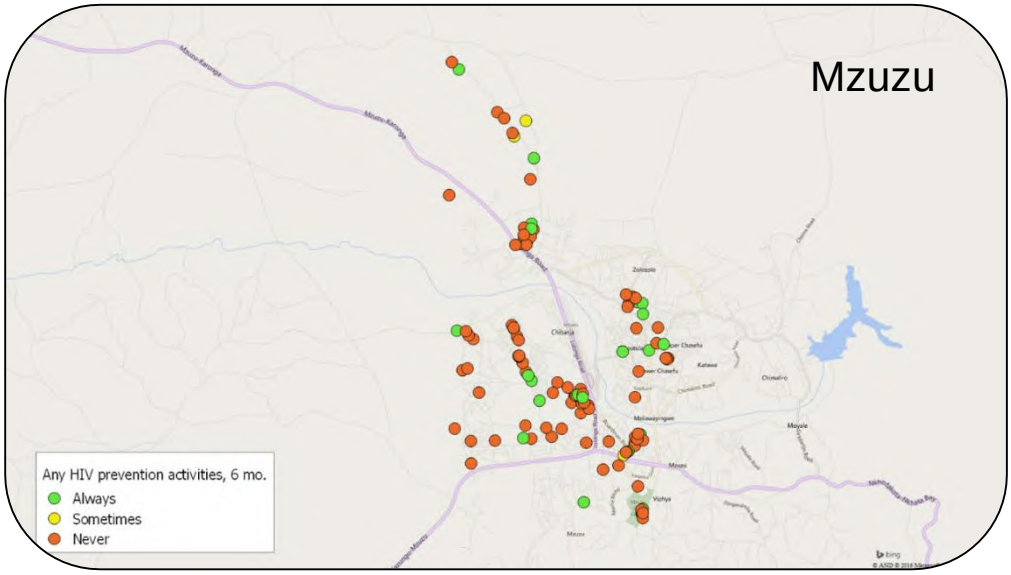
Prevention services at 152 sites



Number of Sites with Prevention Services

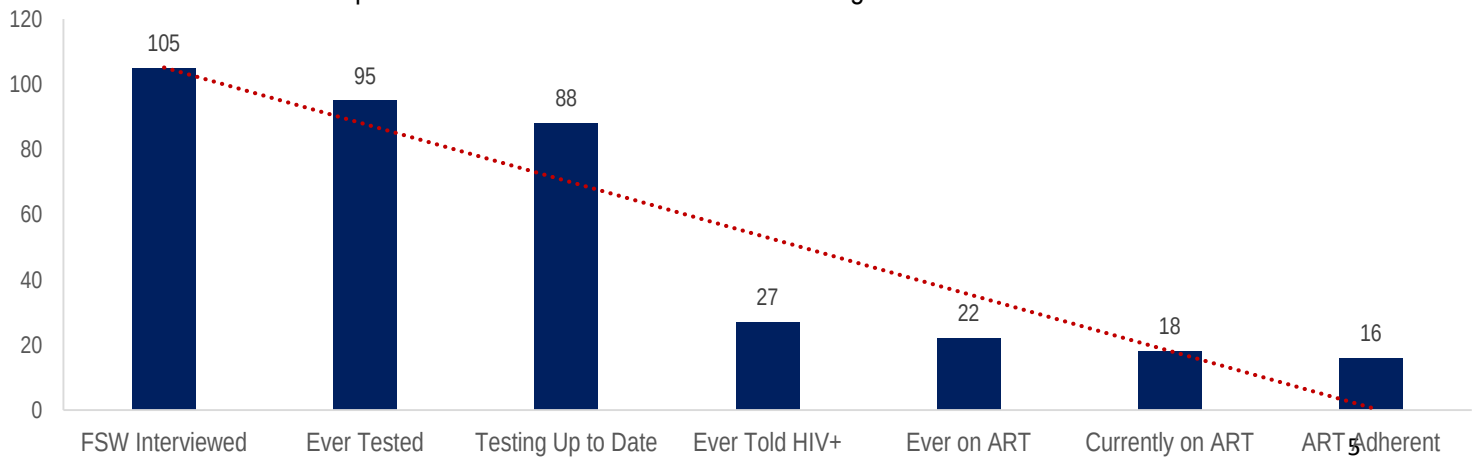
78 Condoms Visible at Time of Visit	**22** Peer Educators Visited (6 Mo)
21 Onsite HIV Testing	**2** Lube Always There

Number of Sites by Number of Services

84 Any Services	**27** Any 2 Services
12 Any 3 Services	**0** Any 4 Services

Self-reported cascade for female sex workers

Updated cascade for FSW interviewed during PLACE Form B.



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Mangochi, Malawi

Weir SS, Bula A, Lancaster K, Herce M

Fieldwork summary

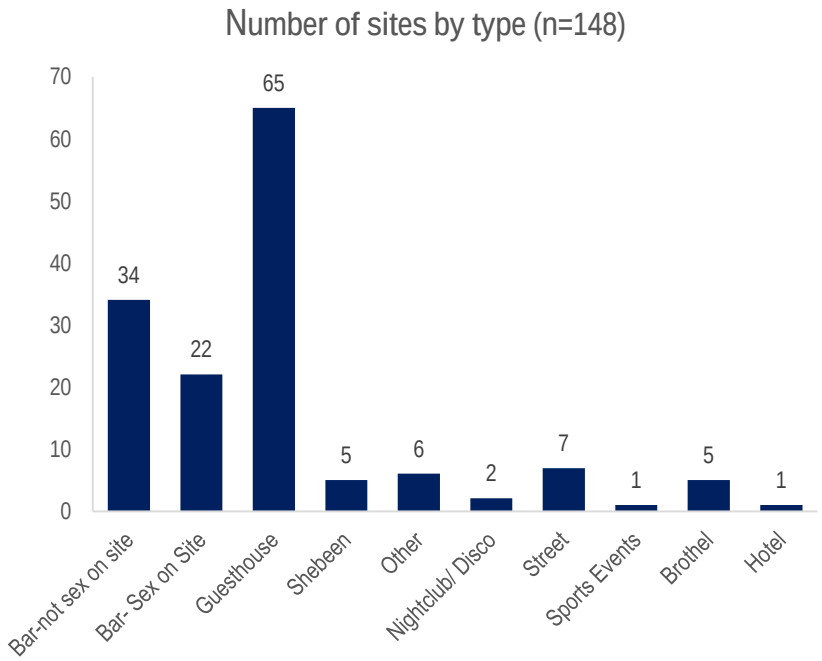
182 community informants interviewed

221 sites estimated

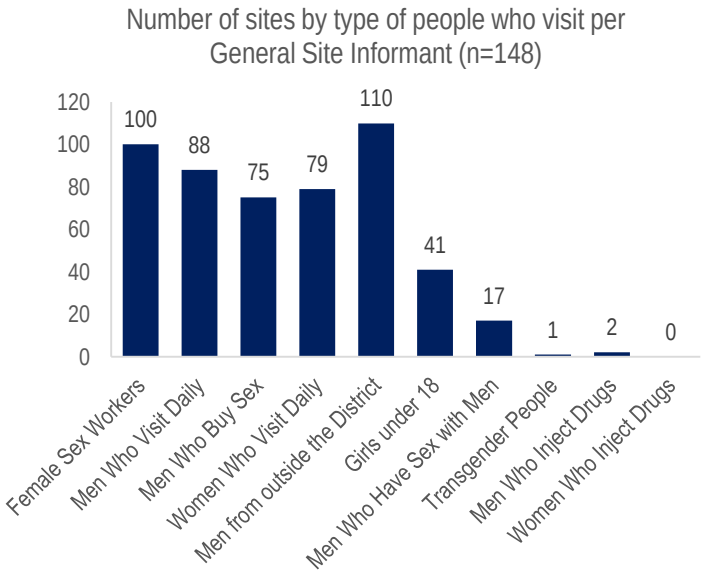
148 sites visited

148 general site informants interviewed

164 FSW & 75 MSM site informants interviewed



Who can be reached at PLACE Sites?



Population size estimate (n=221)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	727	138
High estimate	1139	337
Point estimate	933	238
Rounded	1000	200
% of Women 15-49	<1%	------
% of Men 15-49	------	.< 1%

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Prevention Services at 148 Sites

Number of Sites with Prevention Services

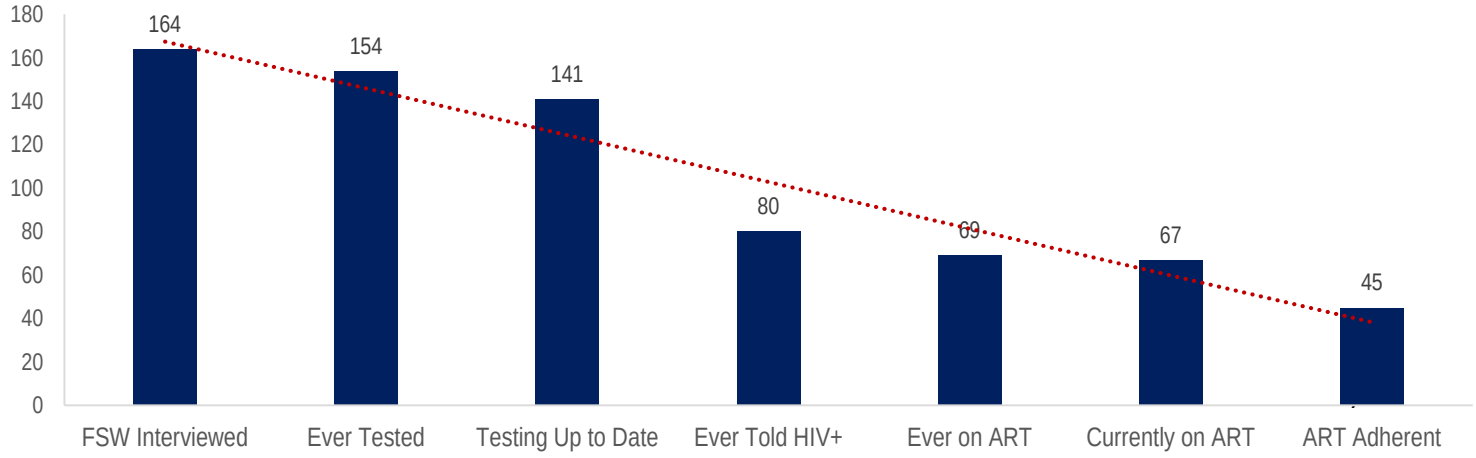
45 Condoms Visible at Time of Visit	**20** Peer Educators Visited (6 Mo)
6 Onsite HIV Testing	**8** Lube Always There

Number of Sites by Number of Services

56 Any Services	**16** Any 2 Services
5 Any 3 Services	**2** Any 4 Services

Self-reported cascade for female sex workers

Updated cascade for FSW interviewed during PLACE Form B.



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Machinga,Malawi

Weir SS, Bula A, Lancaster K, Herce M

Fieldwork summary

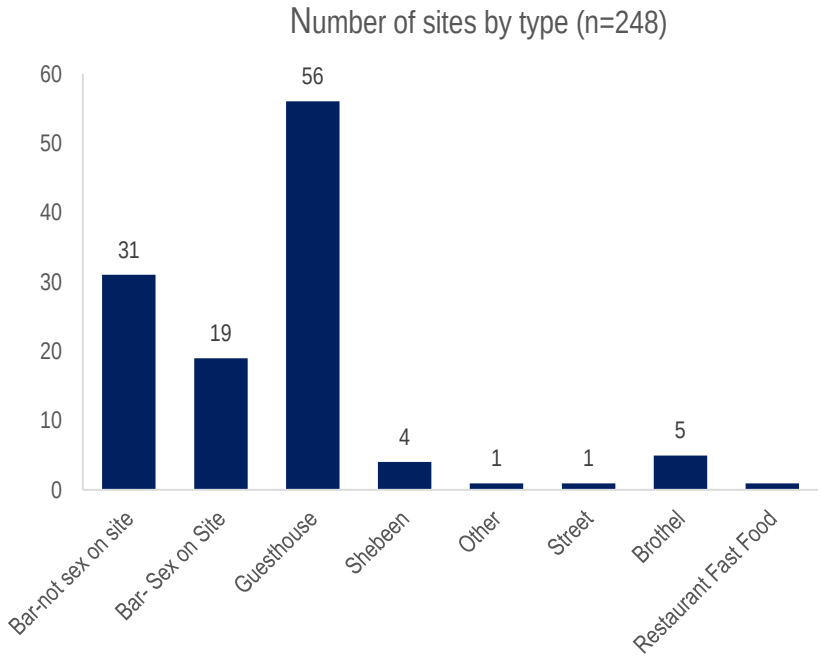
122 community informants interviewed

248 sites estimated

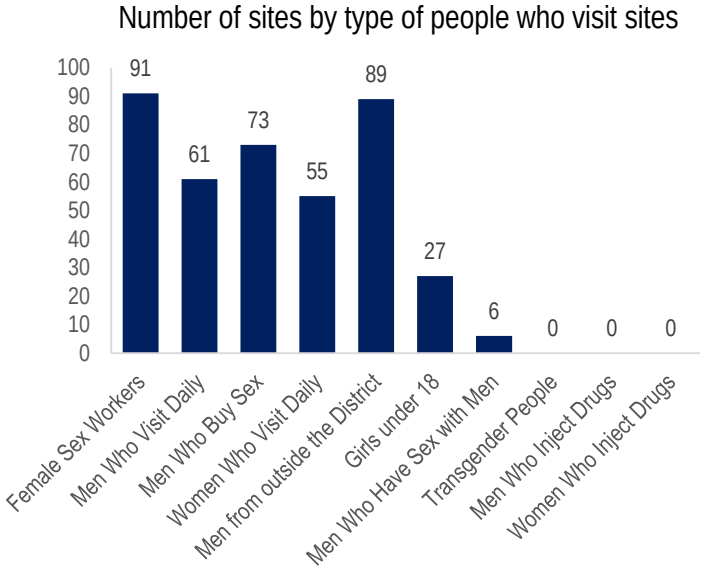
118 sites visited

118 general site informants interviewed

102 FSW & 0 MSM site informants interviewed



Who can be reached at PLACE Sites?



Population size estimate (n=118)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	767	0
High estimate	1,284	0
Point estimate	1,026	0
Rounded	1,000	0
% of Women 15-49	0.8%	-----
% of Men 15-49	------	0%

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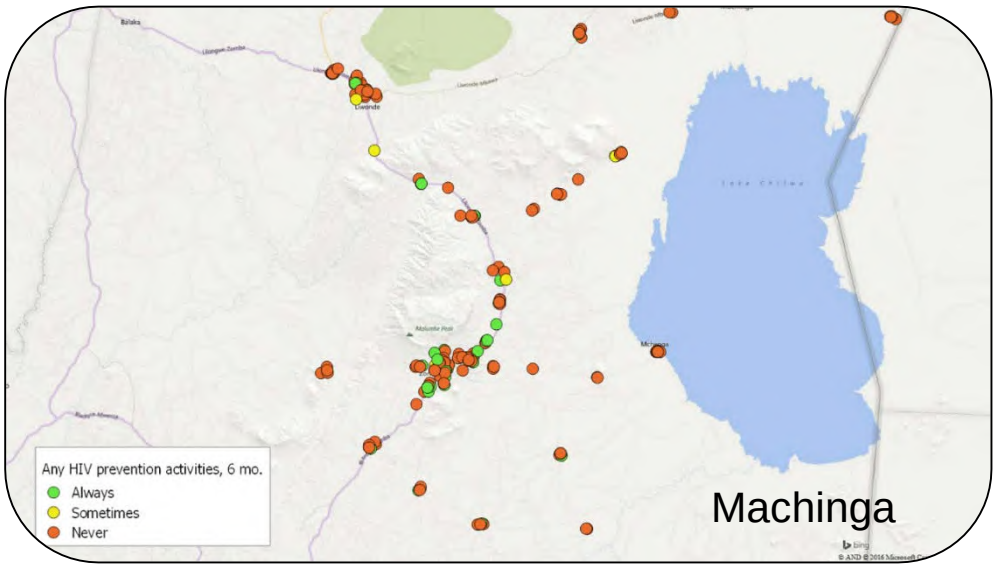
Prevention services at 118 sites



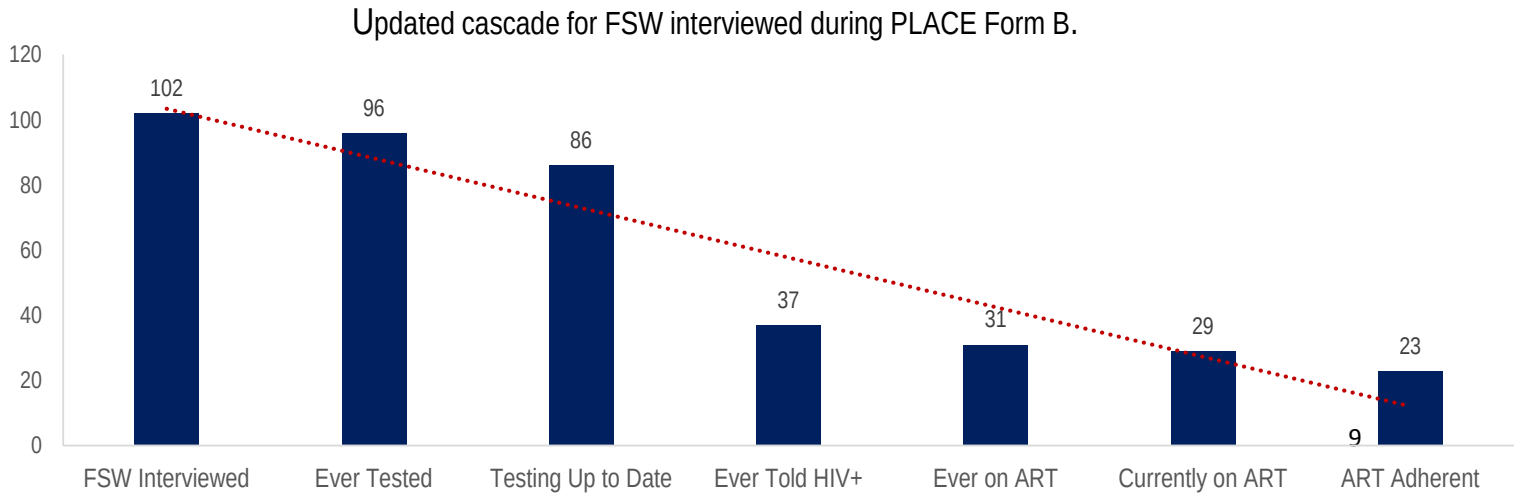
Number of Sites with Prevention Services

42 Condoms Visible at Time of Visit	**3** Peer Educators Visited (6 Mo)
2 Onsite HIV Testing	**0** Lube Always There

Number of Sites by Number of Services

42 Any Services	**5** Any 2 Services
0 Any 3 Services	**0** Any 4 Services

Self-reported cascade for female sex workers



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Zomba, Malawi

Weir SS, Bula A, Herce M

Fieldwork summary

171 community informants interviewed

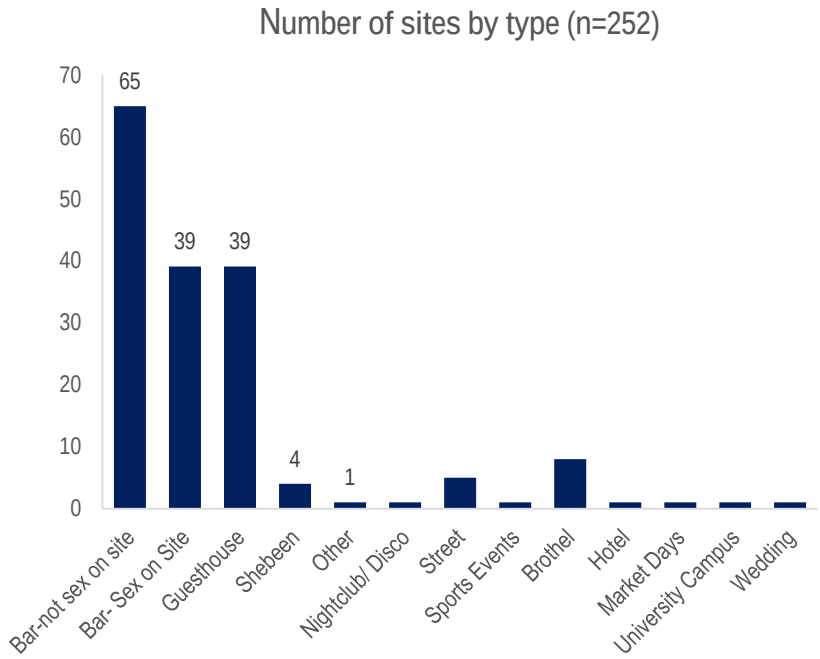
252 sites estimated

167 sites visited

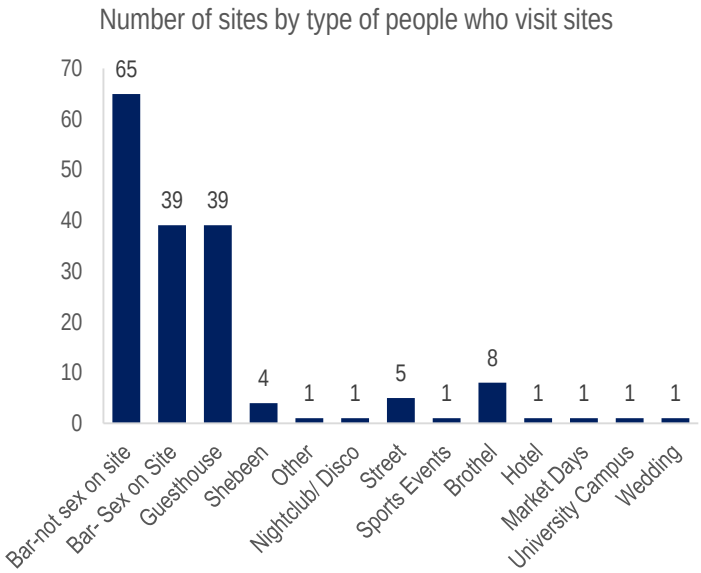
167 general site informants interviewed

154 FSW and 74 MSM site informants interviewed

152 women and FSW, 366 Men,and 218 MSM interviewed and tested for HIV



Who can be reached at PLACE Sites?



Population size estimate (n=167)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	1,043	189
High estimate	2,419	362
Point estimate	1,731	270
Rounded	1,700	200
% of Women 15-49	1.3%	------
% of Men 15-49	------	<1%

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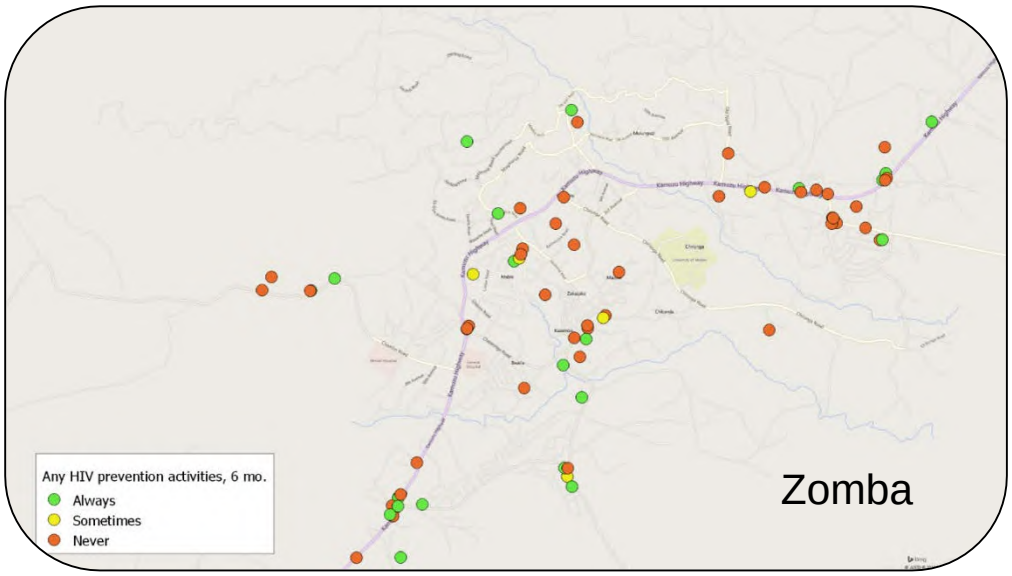
Prevention services at 167 sites



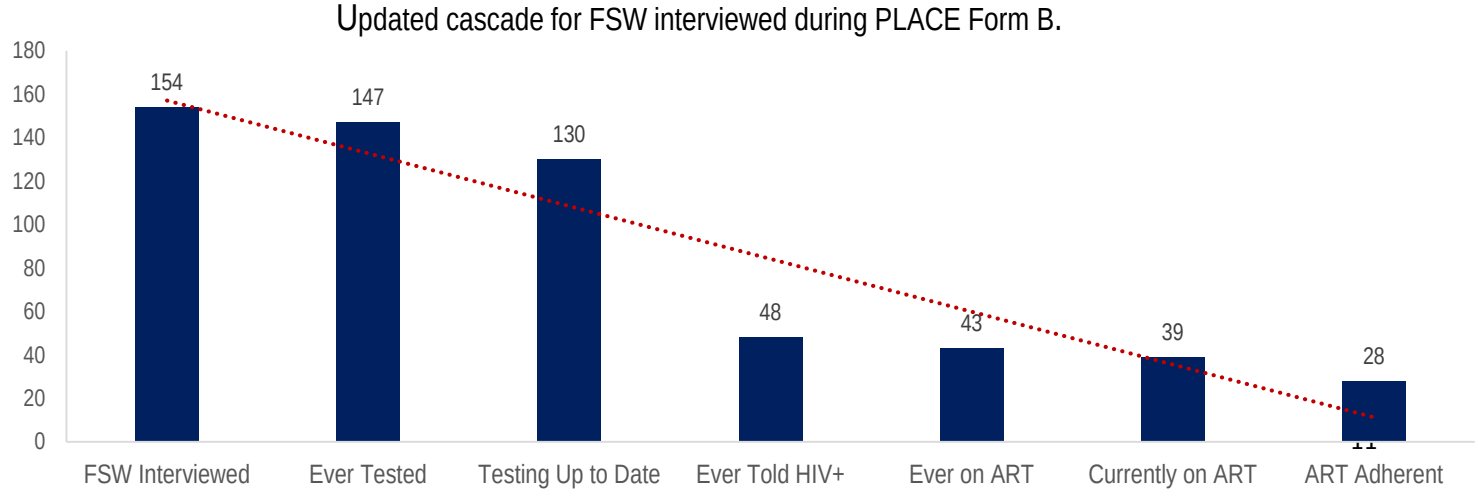
Number of Sites with Prevention Services

77 Condoms Visible at Time of Visit	**5** Peer Educators Visited (6 Mo)
4 Onsite HIV Testing	**1** Lube Always There

Number of Sites by Number of Services

300 Any Services	**50** Any 2 Services
30 Any 3 Services	**20** Any 4 Services

Self-reported cascade for female sex workers



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Lilongwe, Malawi

Weir SS, Bula A, Lancaster K, Ewing W, Herce M

Fieldwork summary

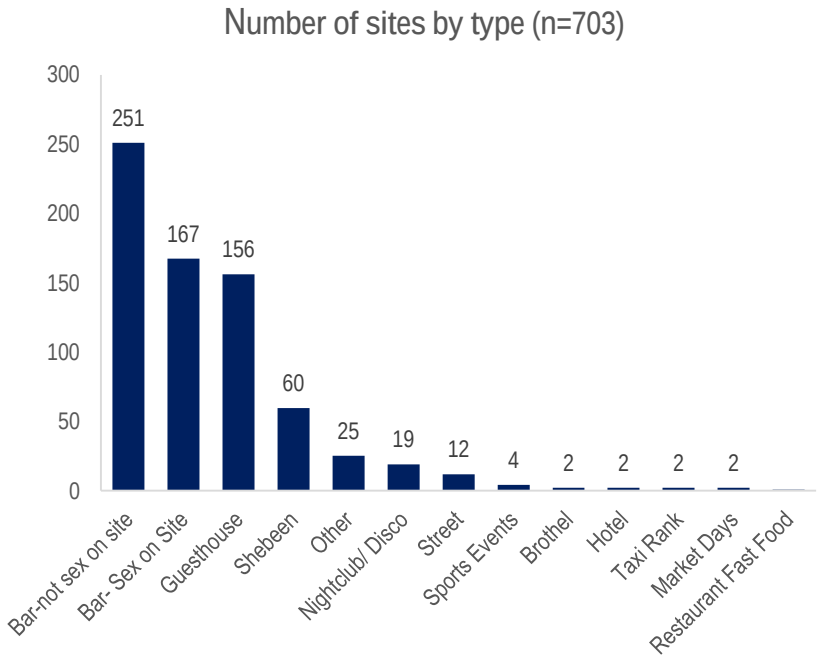
940 community informants interviewed

993 sites estimated

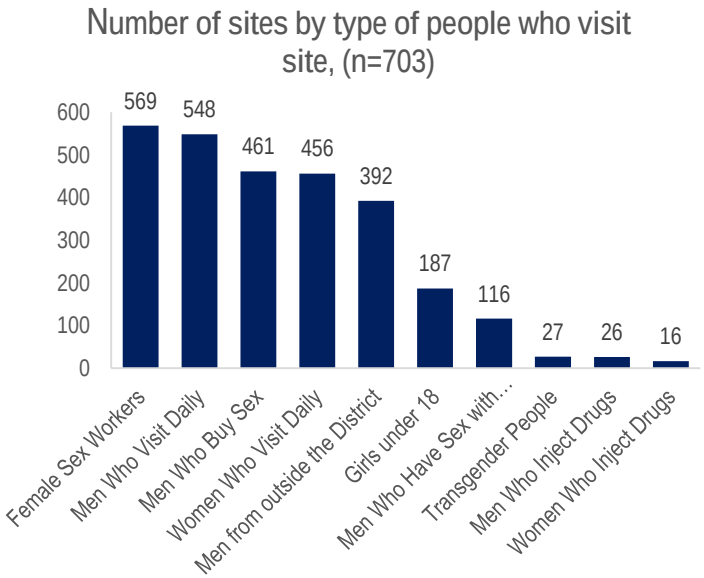
703 sites visited

703 general site informants interviewed

622 FSW & 40 MSM site informants interviewed



Who can be reached at PLACE Sites?



Population size estimate (n=993)	Female Sex Workers	Men Who Have Sex With Men
Low estimate	5,752	2,382
High estimate	8,136	3,448
Point estimate	6,944	2,916
Rounded	7,000	3,000
% of Women 15-49	2.4%	- - - - -
% of Men 15-49	- - - - -	1.%

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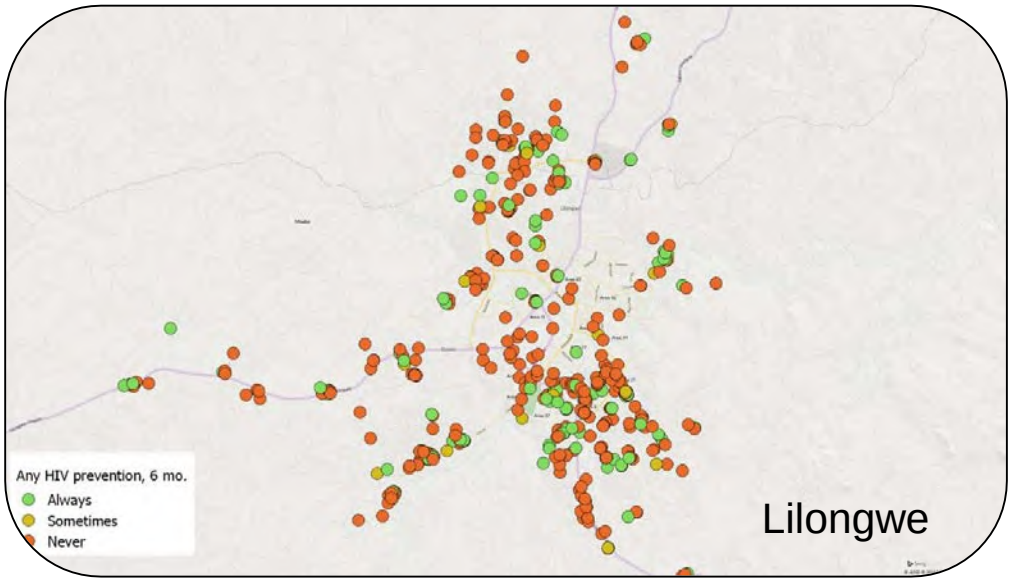
Prevention services at 703 visited sites



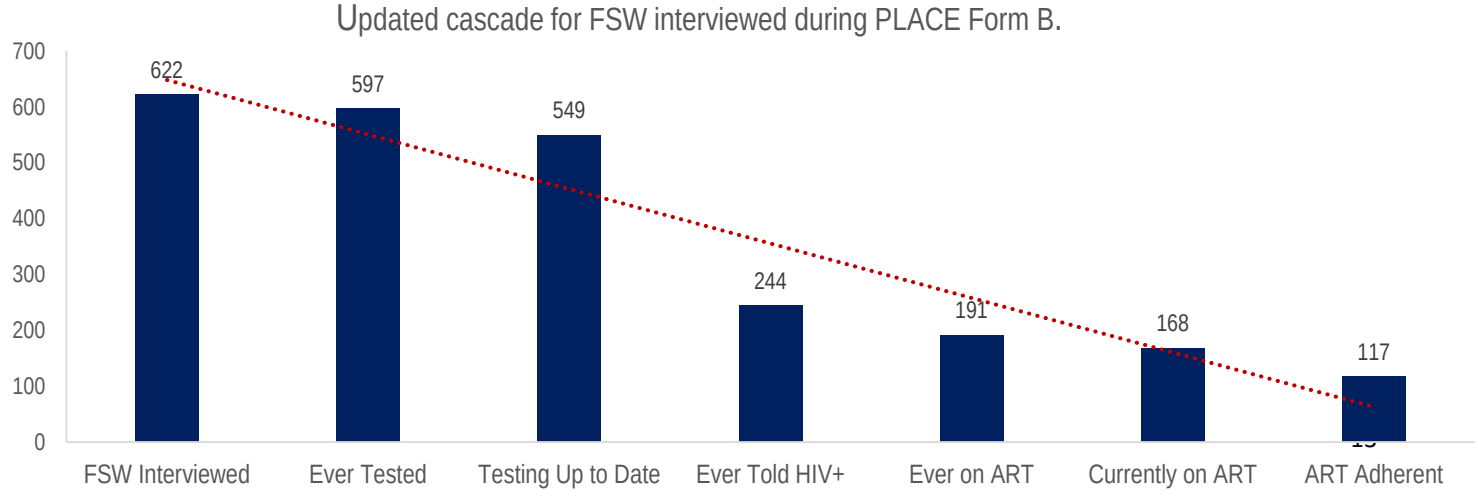
Number of Sites with Prevention Services

300 Condoms Visible at Time of Visit	**52** Peer Educators Visited (6 Mo)
67 Onsite HIV Testing	**6** Lube Always There

Number of Sites by Number of Services

339 Any Services	**68** Any 2 Services
17 Any 3 Services	**1** Any 4 Services

Self-reported Cascade for Female Sex Workers



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Appendix 5: PLACE II District Summaries

Rumphi, Malawi

Fieldwork Summary

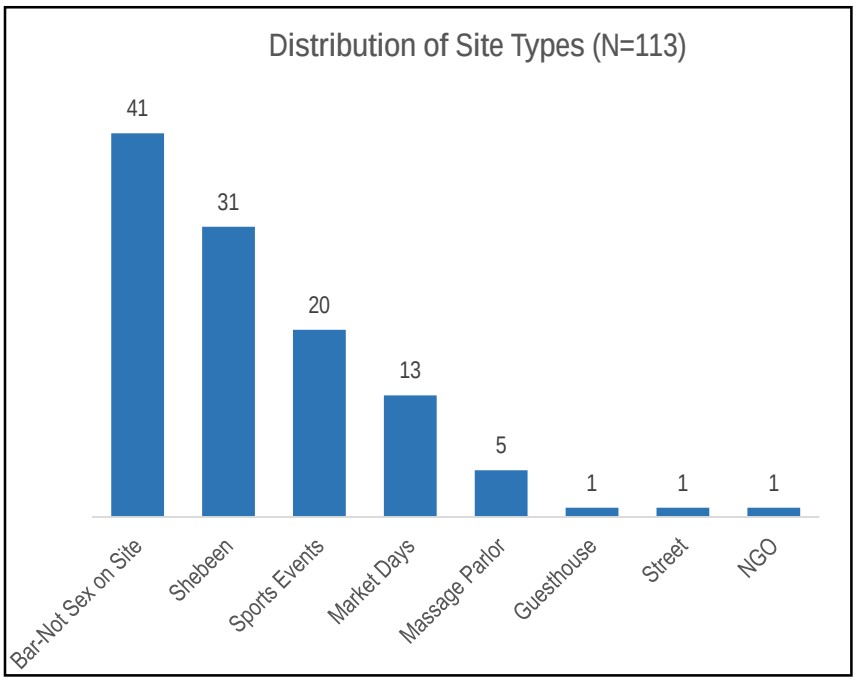
132 community informants interviewed

113 sites estimated

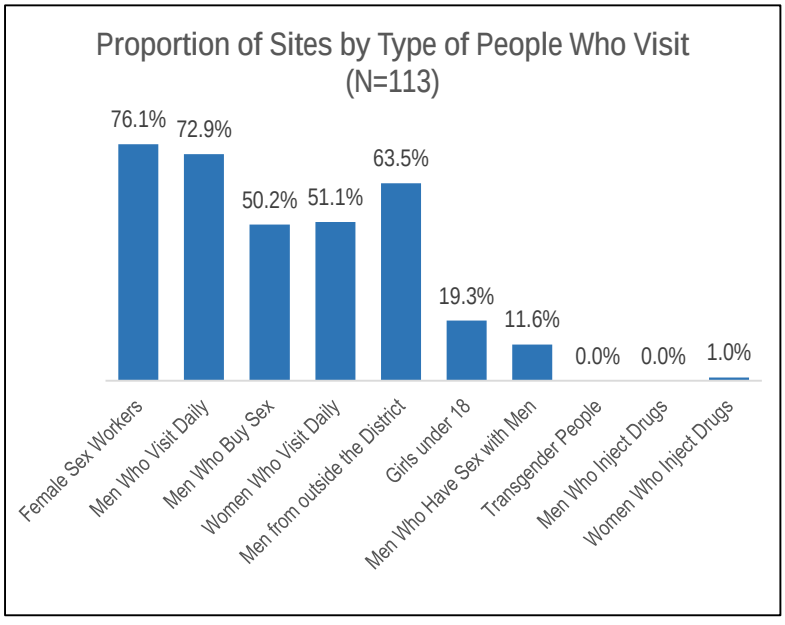
107 sites visited

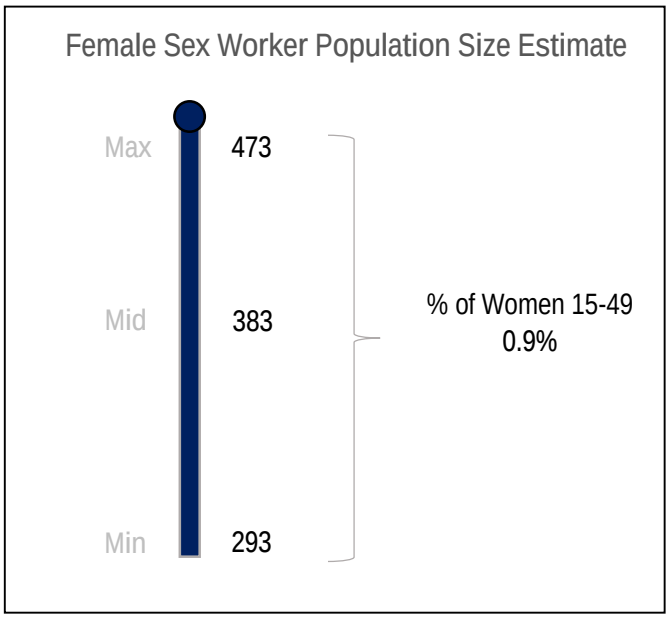
83 general site informants interviewed

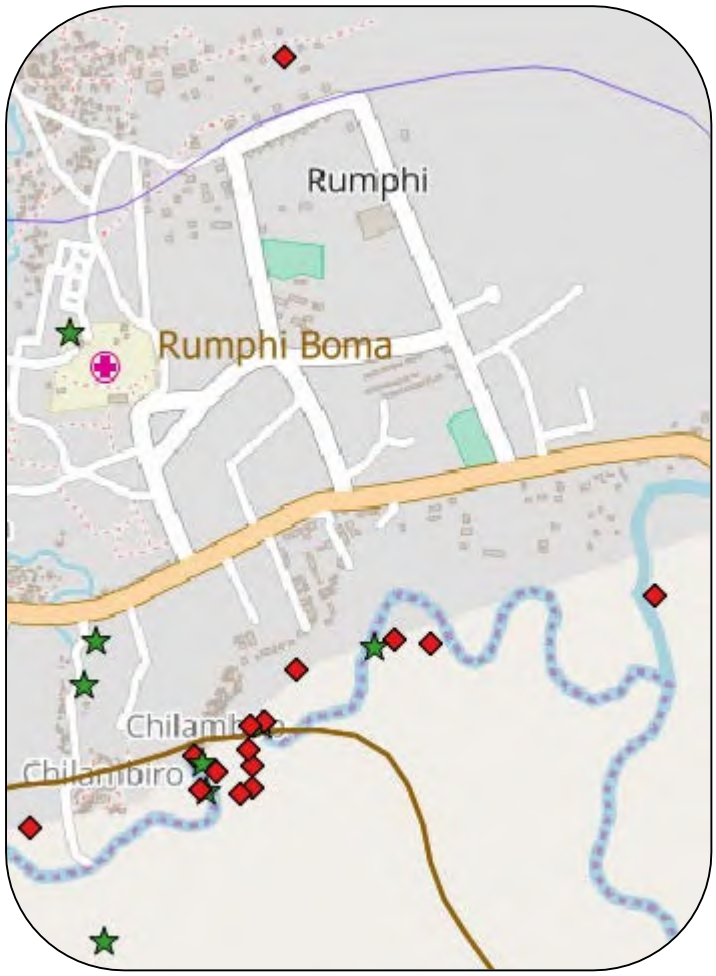
87 female and 131 male patrons and workers interviewed



Who can be reached at PLACE Sites?







Prevention Services at Visited Sites (n=83)

Type of Service Available at Visited Sites

24 Condoms Visible at Time of Visit	**6** Peer Educators Visited (6 Mo)
3 Onsite HIV Testing (6 Mo)	**4** Lube Distributed (6 Mo)

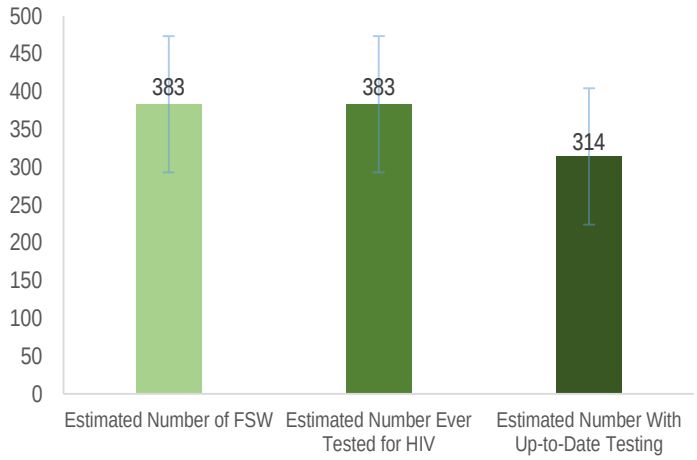
Number of Prevention Services at Visited Sites

1	2	3	4
20	**3**	**3**	**0**

Prevention Services (#)

Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals

*Adherent defined as taking medication five or more days per week.

Nkhotakota, Malawi

Fieldwork Summary

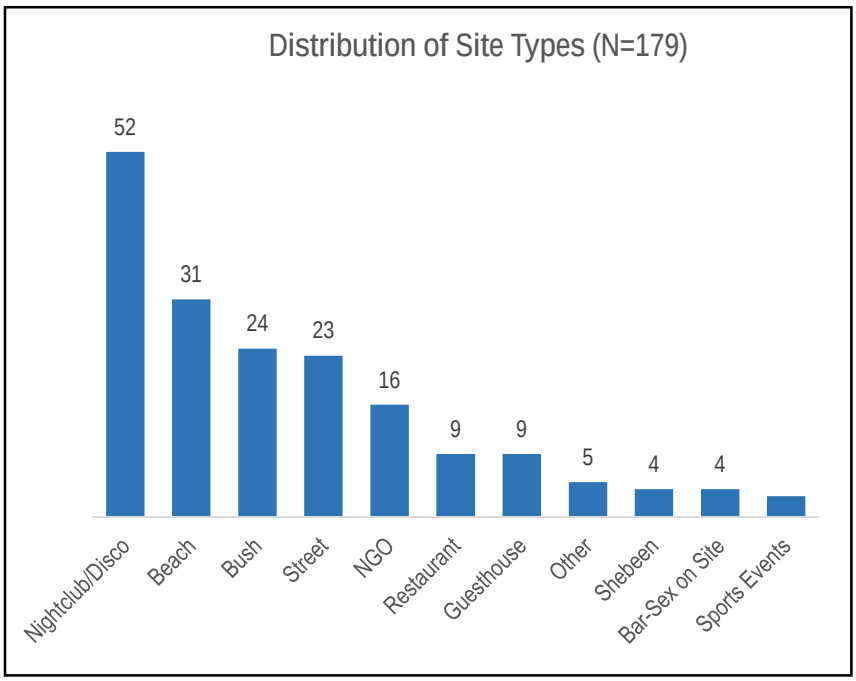
185 community informants interviewed

179 sites estimated

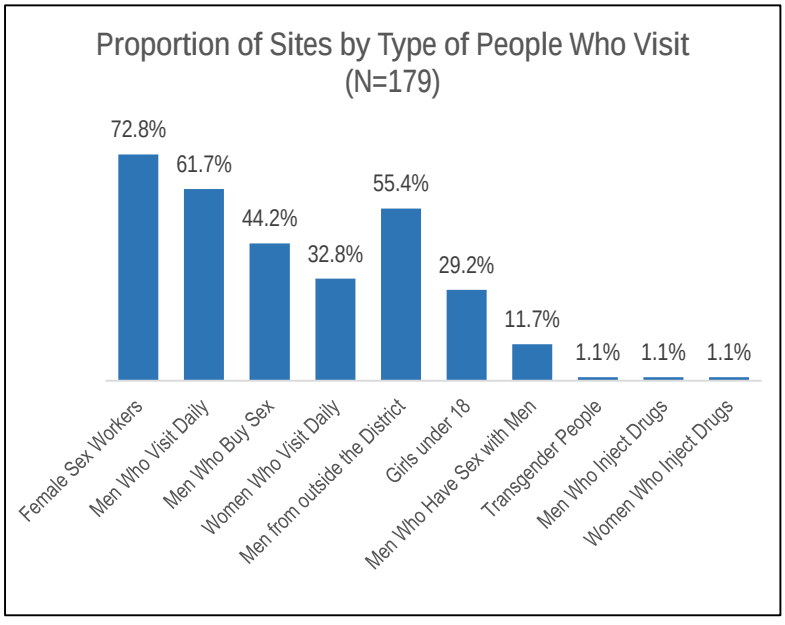
161 sites visited

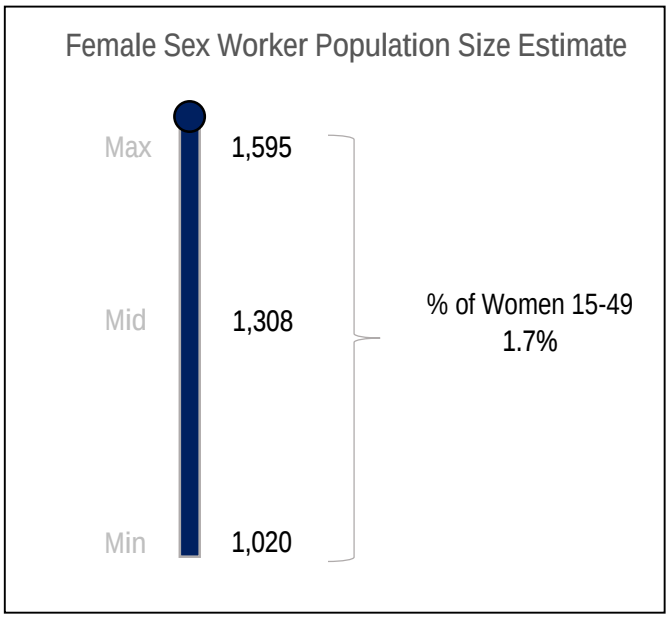
83 general site informants interviewed

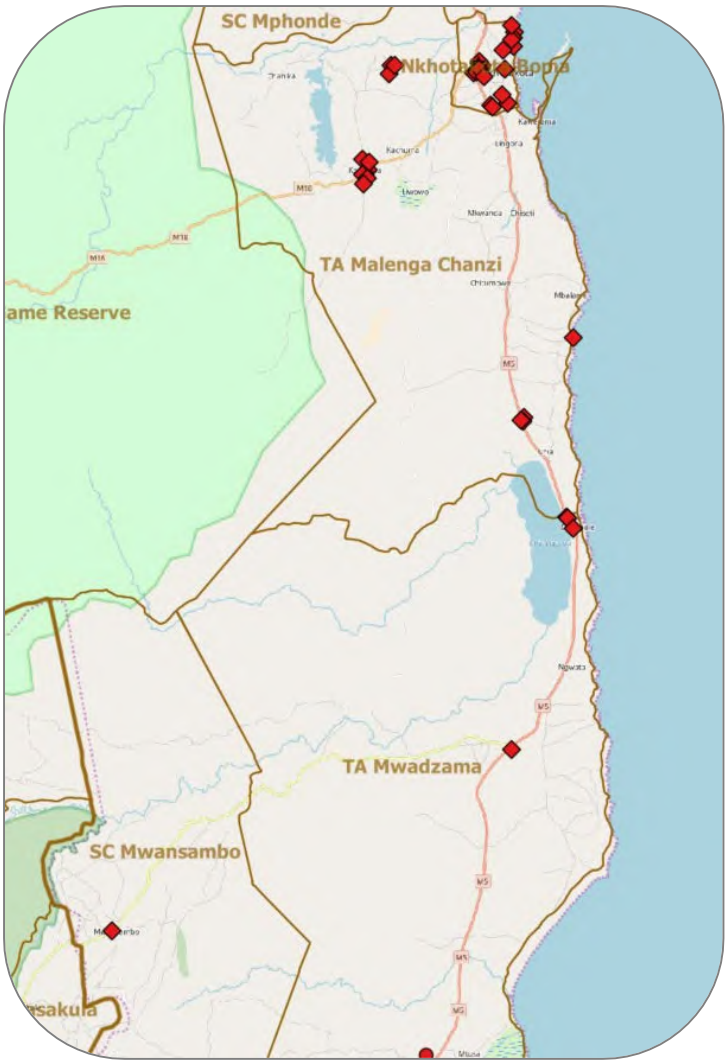
90 female and 63 male patrons and workers interviewed



Who can be reached at PLACE Sites?





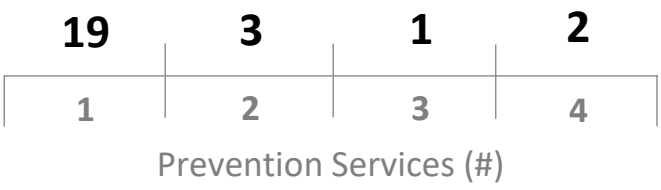


Prevention Services at Visited Sites (n=83)

Type of Service Available at Visited Sites

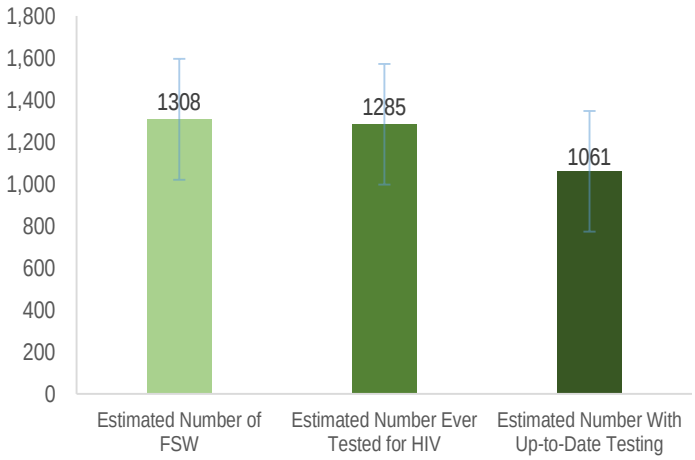
19 Condoms Visible at Time of Visit	**7** Peer Educators Visited (6 Mo)
6 Onsite HIV Testing (6 Mo)	**7** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



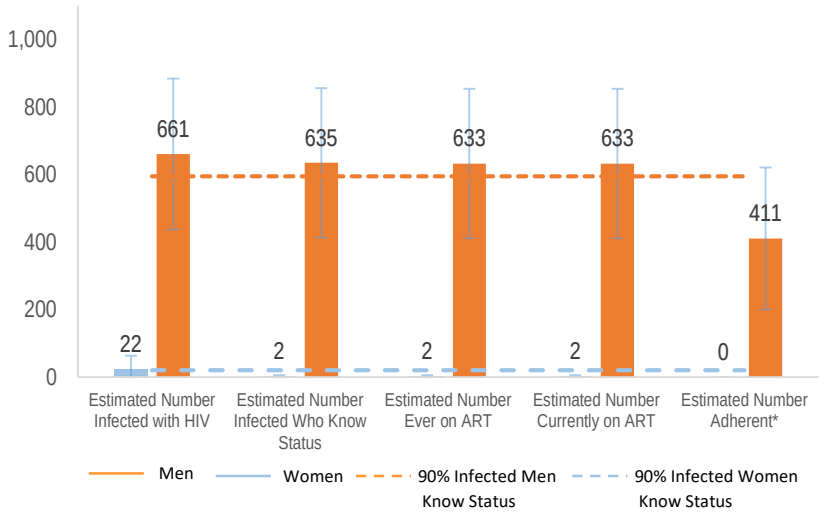
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Dedza, Malawi

Fieldwork Summary

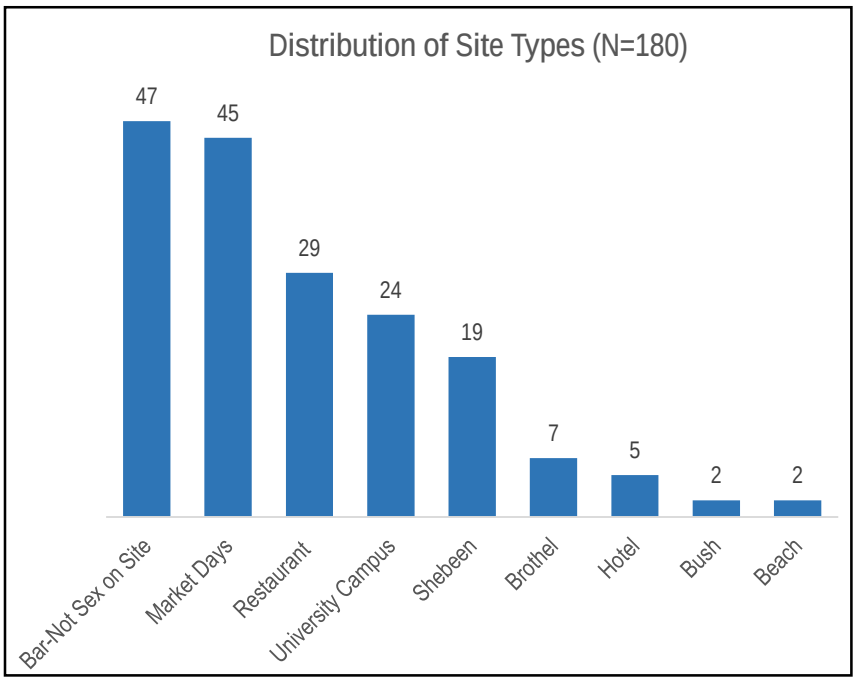
165 community informants interviewed

180 sites estimated

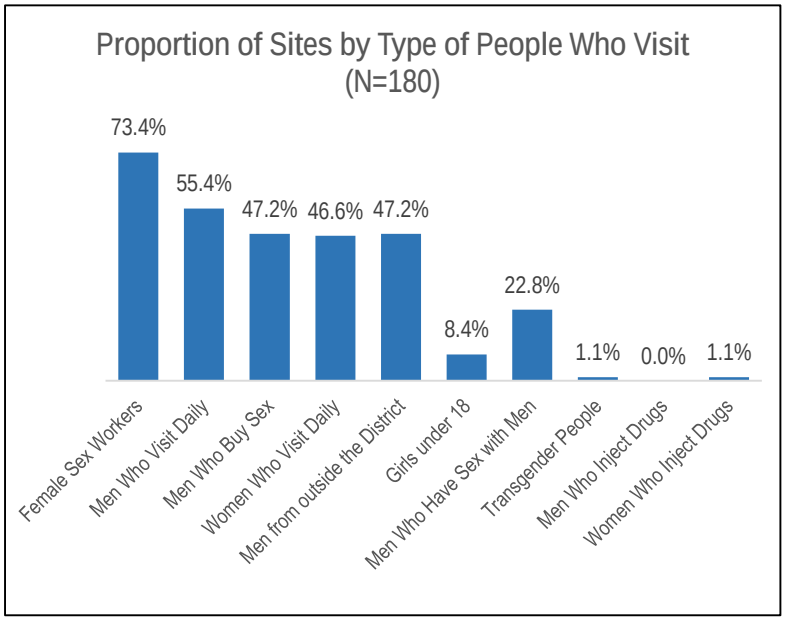
166 sites visited

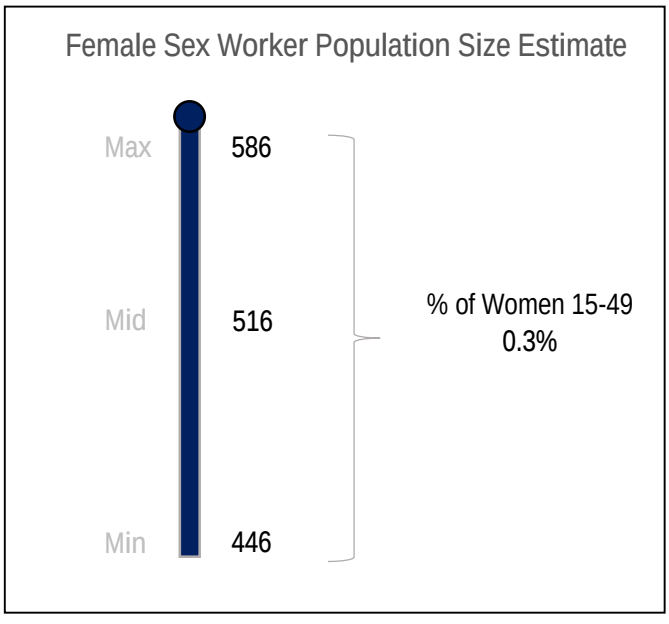
84 general site informants interviewed

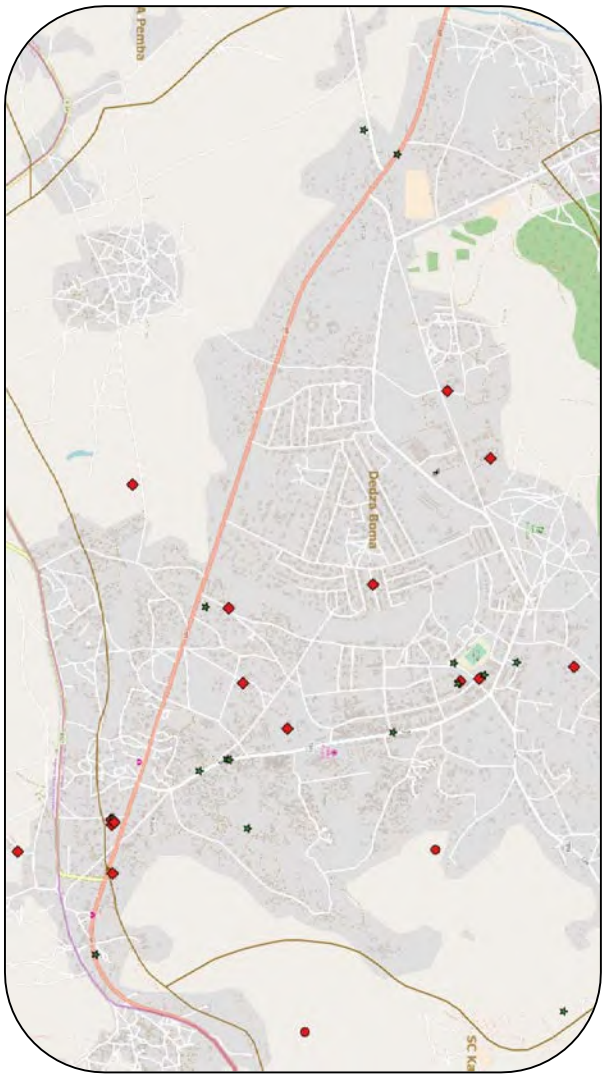
81 female and 101 male patrons and workers interviewed



Who can be reached at PLACE Sites?





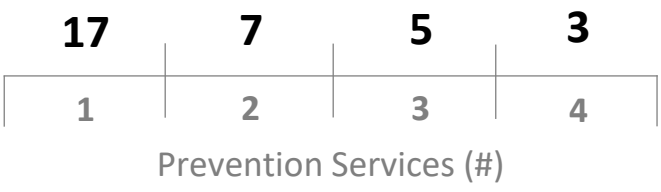


Prevention Services at Visited Sites (n=84)

Type of Service Available at Visited Sites

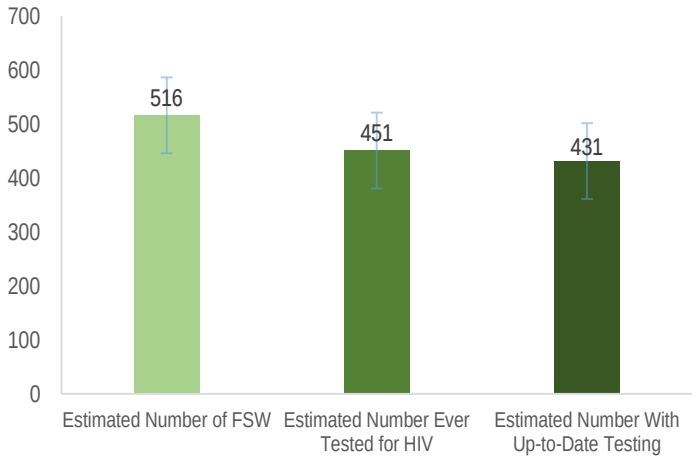
27 Condoms Visible at Time of Visit	**18** Peer Educators Visited (6 Mo)
16 Onsite HIV Testing (6 Mo)	**9** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



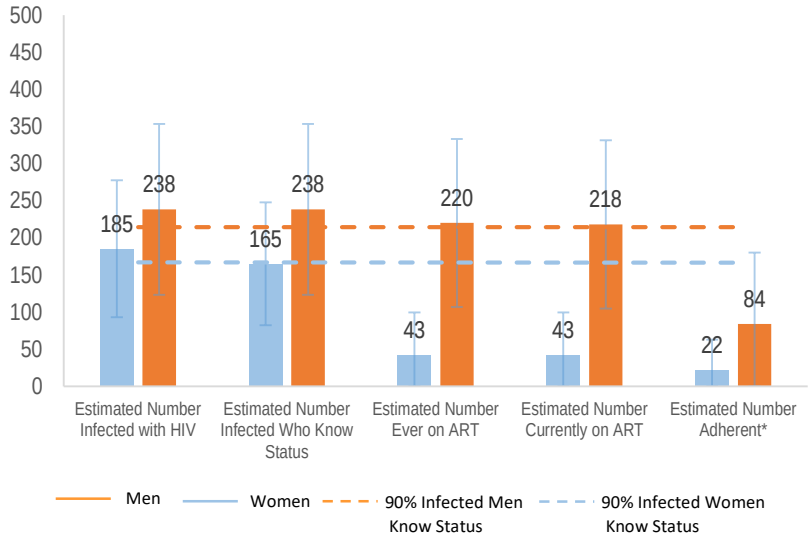
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Balaka, Malawi

Fieldwork Summary

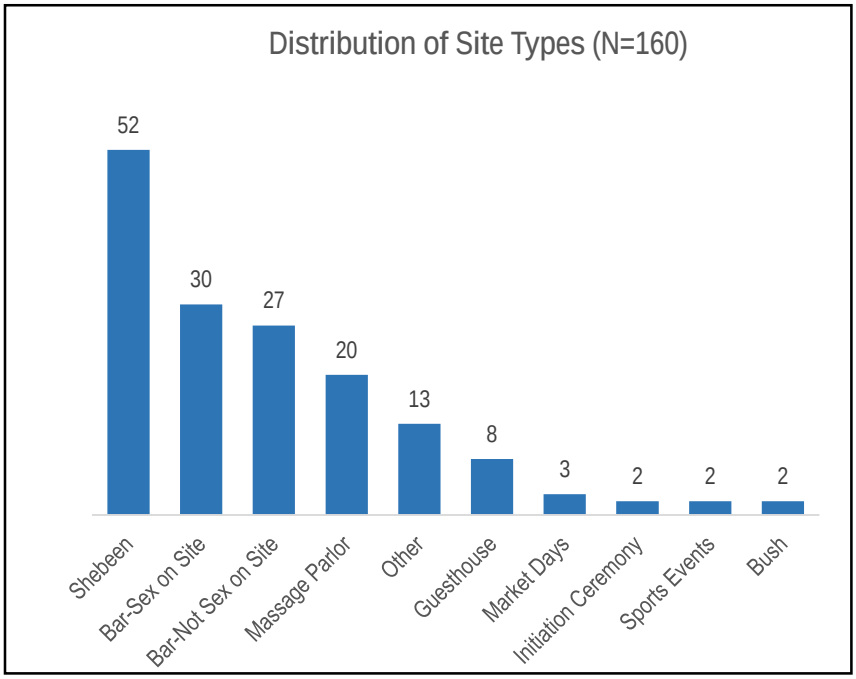
156 community informants interviewed

160 sites estimated

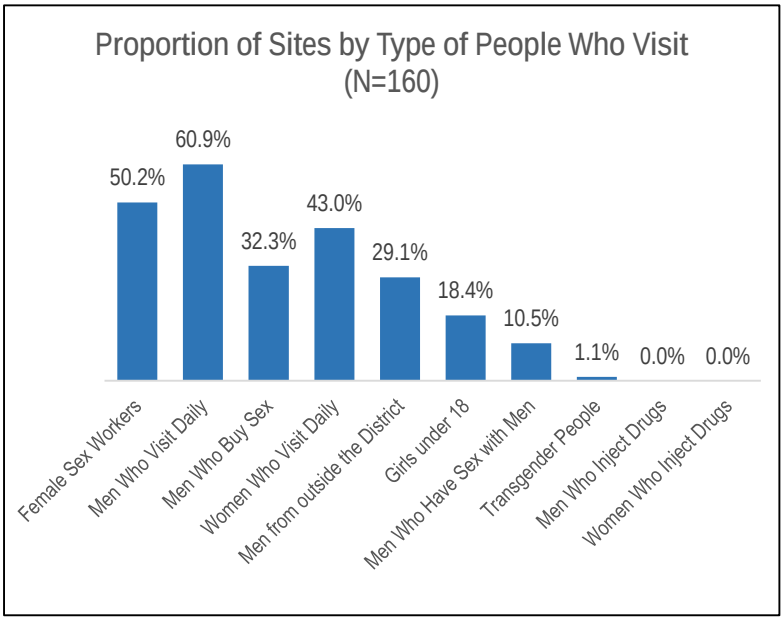
152 sites visited

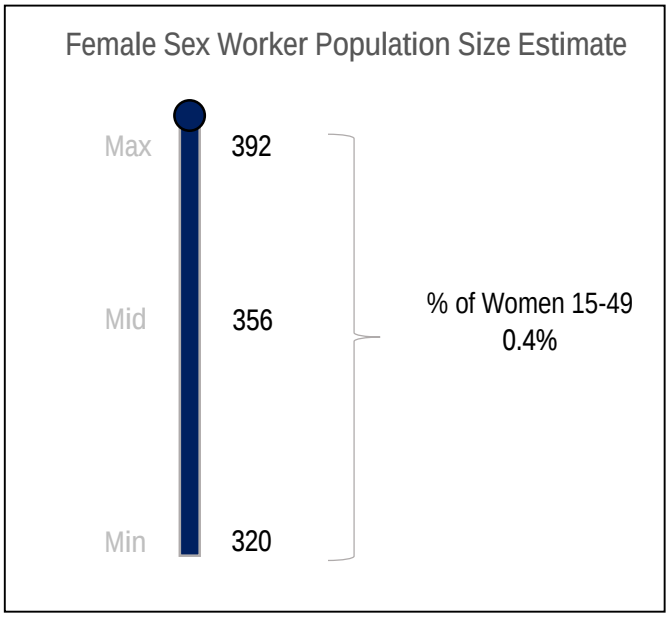
80 general site informants interviewed

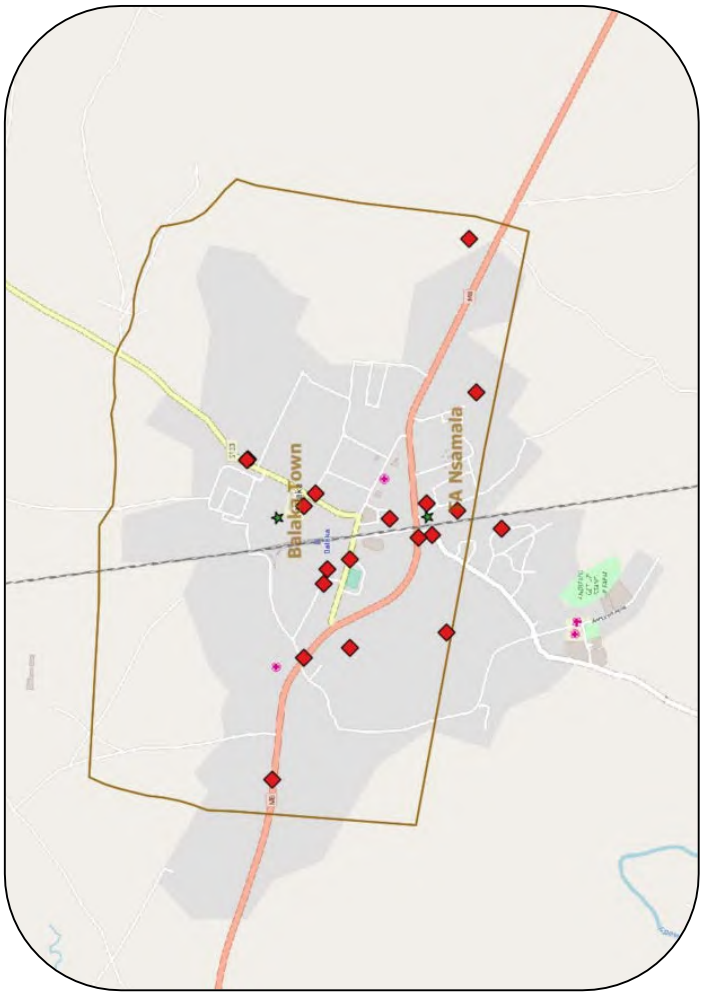
62 female and 172 male patrons and workers interviewed



Who can be reached at PLACE Sites?







Prevention Services at Visited Sites (n=80)

Type of Service Available at Visited Sites

15 Condoms Visible at Time of Visit	**3** Peer Educators Visited (6 Mo)
3 Onsite HIV Testing (6 Mo)	**2** Lube Distributed (6 Mo)

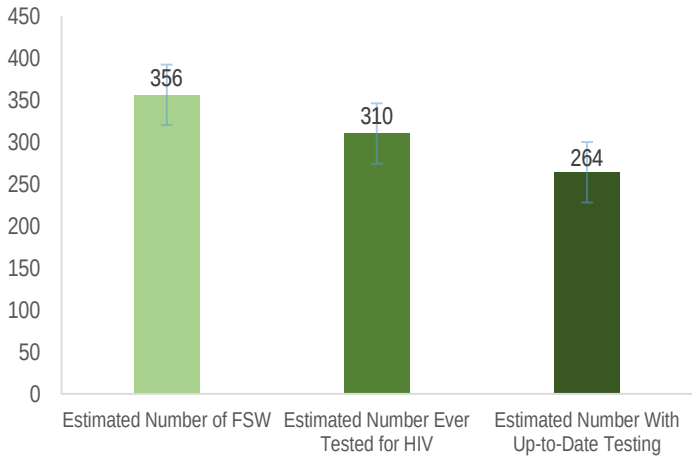
Number of Prevention Services at Visited Sites

1	2	3	4
14	0	0	1

Prevention Services (#)

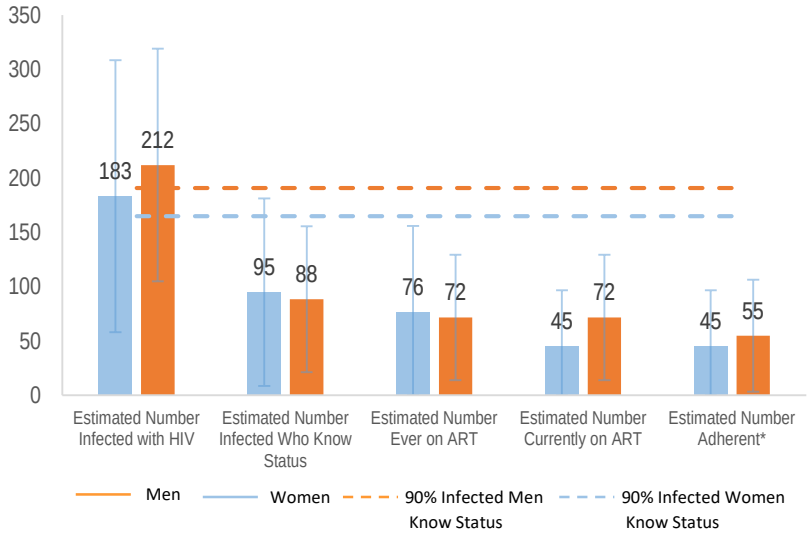
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Salima, Malawi

Fieldwork Summary

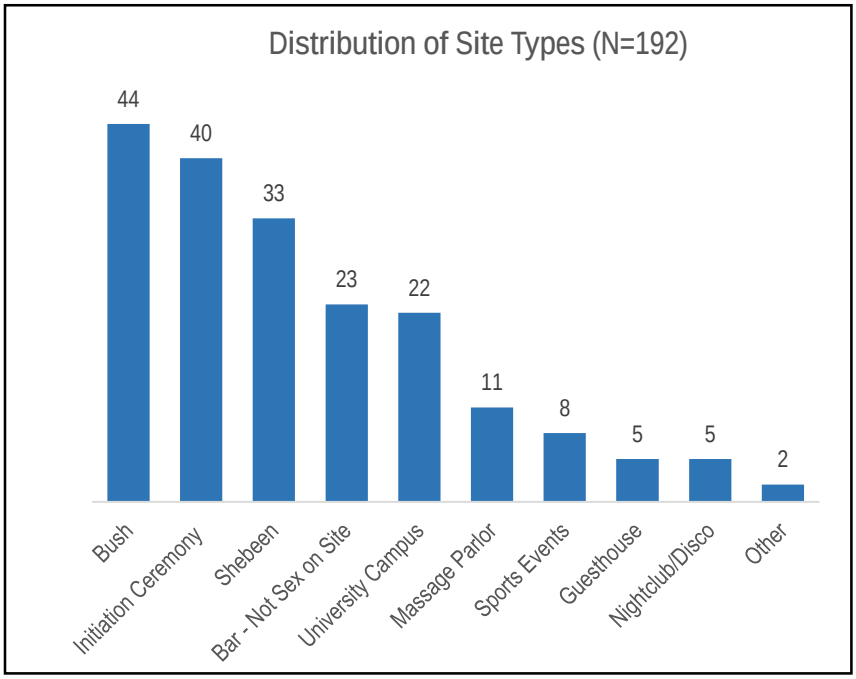
202 community informants interviewed

192 sites estimated

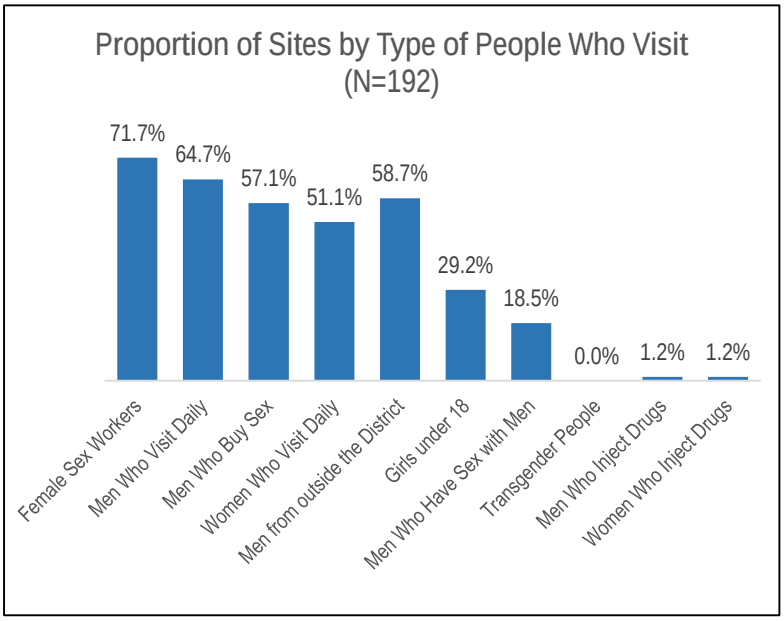
160 sites visited

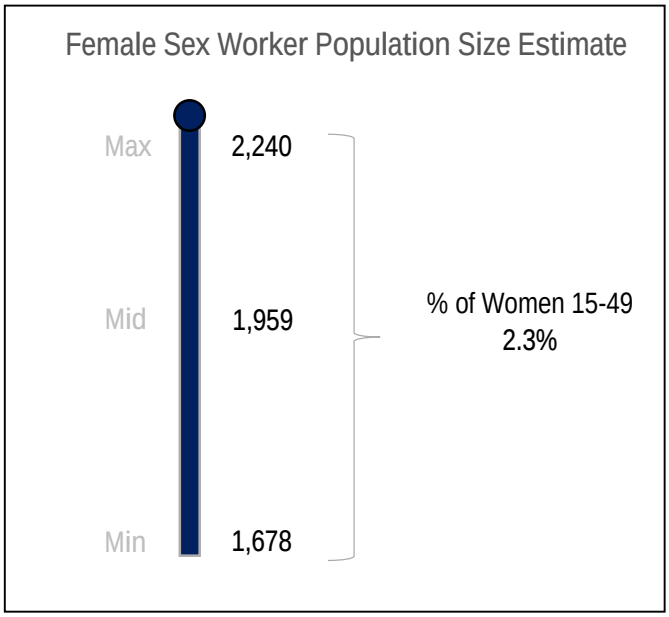
86 general site informants interviewed

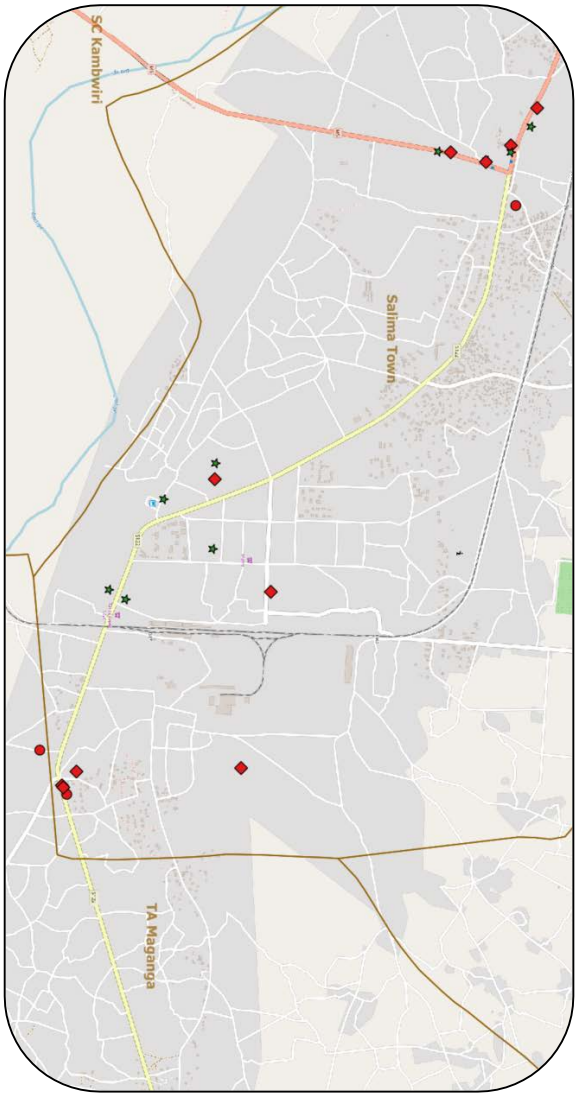
134 female and 162 male patrons and workers interviewed



Who can be reached at PLACE Sites?





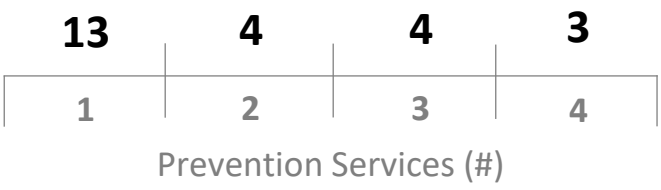


Prevention Services at Visited Sites (n=86)

Type of Service Available at Visited Sites

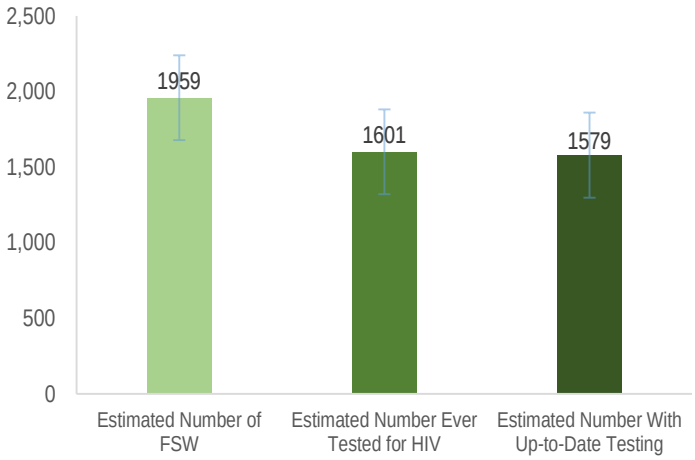
21 Condoms Visible at Time of Visit	**15** Peer Educators Visited (6 Mo)
15 Onsite HIV Testing (6 Mo)	**5** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



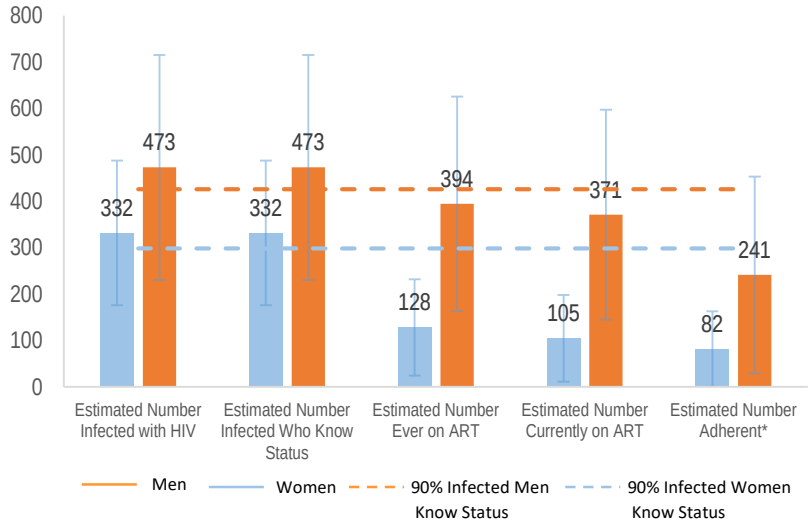
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Salima, Malawi

Fieldwork Summary

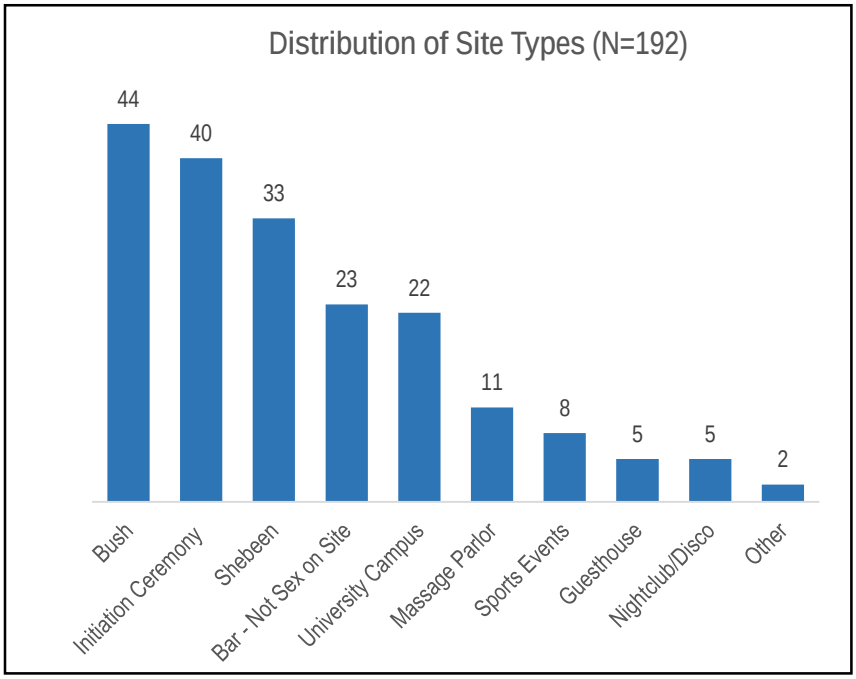
202 community informants interviewed

192 sites estimated

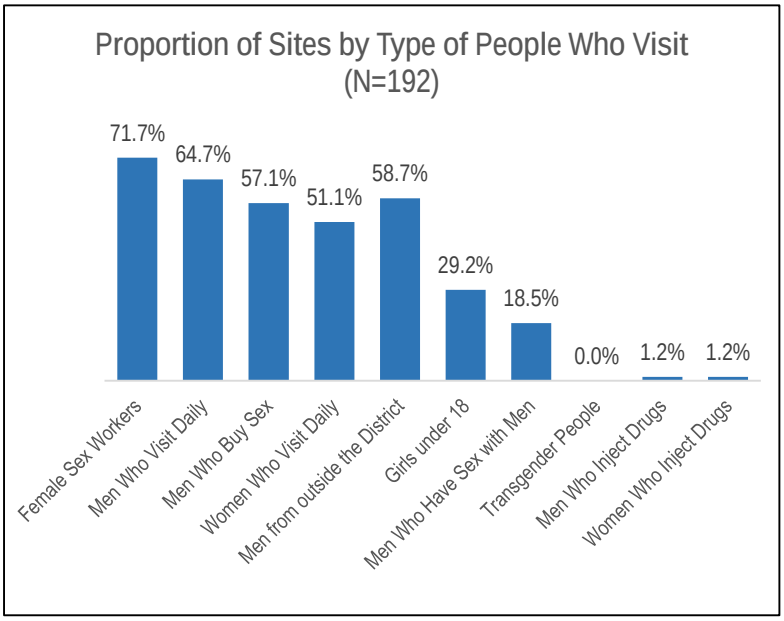
160 sites visited

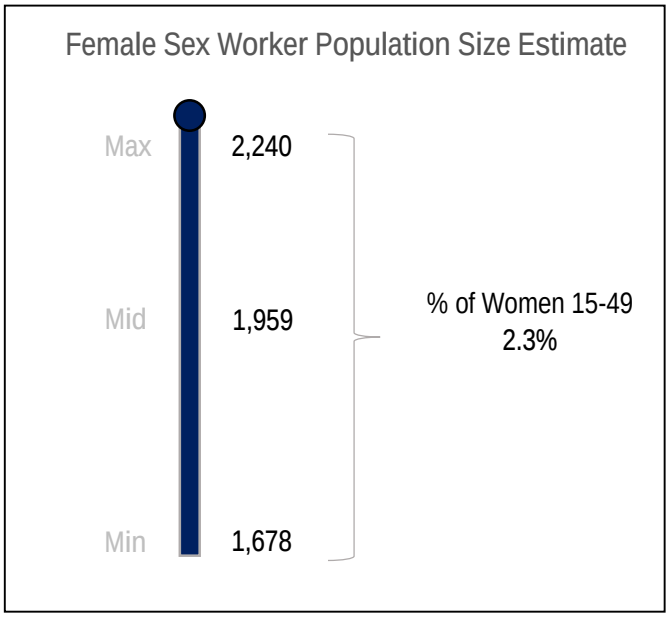
86 general site informants interviewed

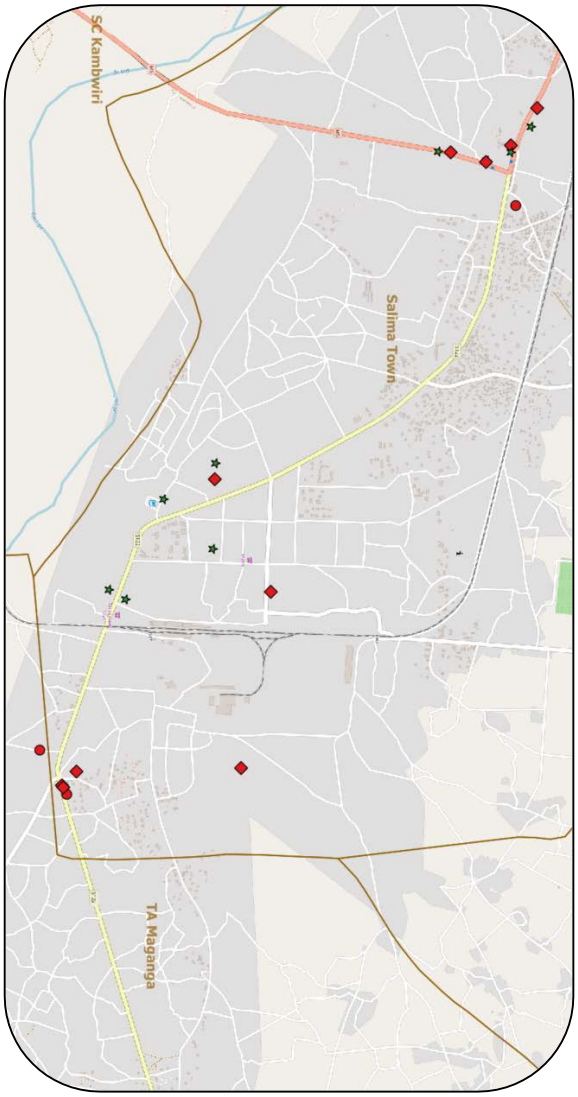
134 female and 162 male patrons and workers interviewed



Who can be reached at PLACE Sites?





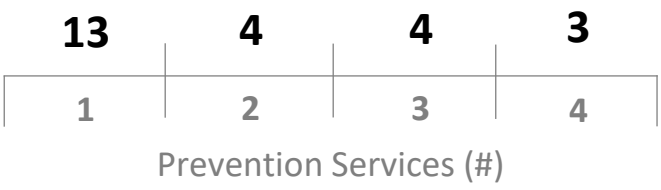


Prevention Services at Visited Sites (n=86)

Type of Service Available at Visited Sites

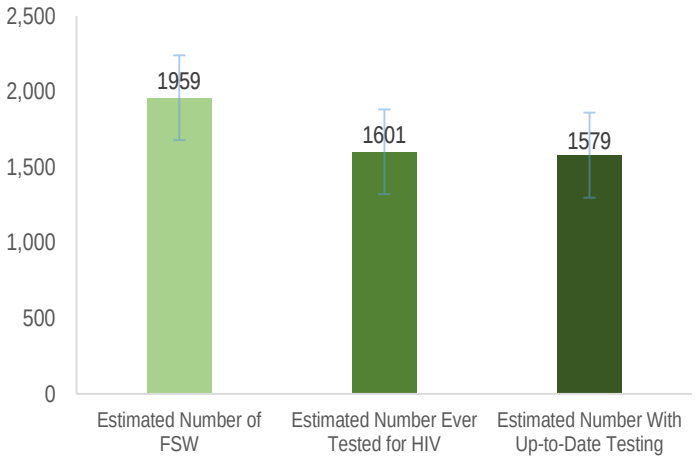
21 Condoms Visible at Time of Visit	**15** Peer Educators Visited (6 Mo)
15 Onsite HIV Testing (6 Mo)	**5** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



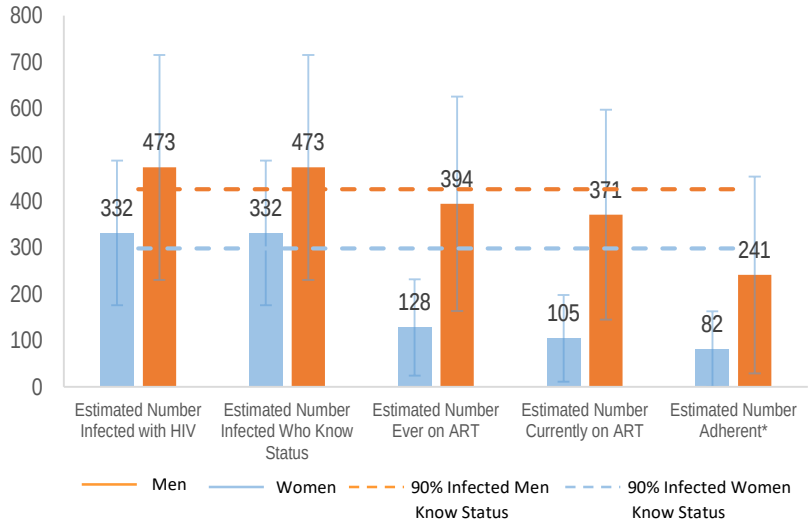
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Ntcheu, Malawi

Fieldwork Summary

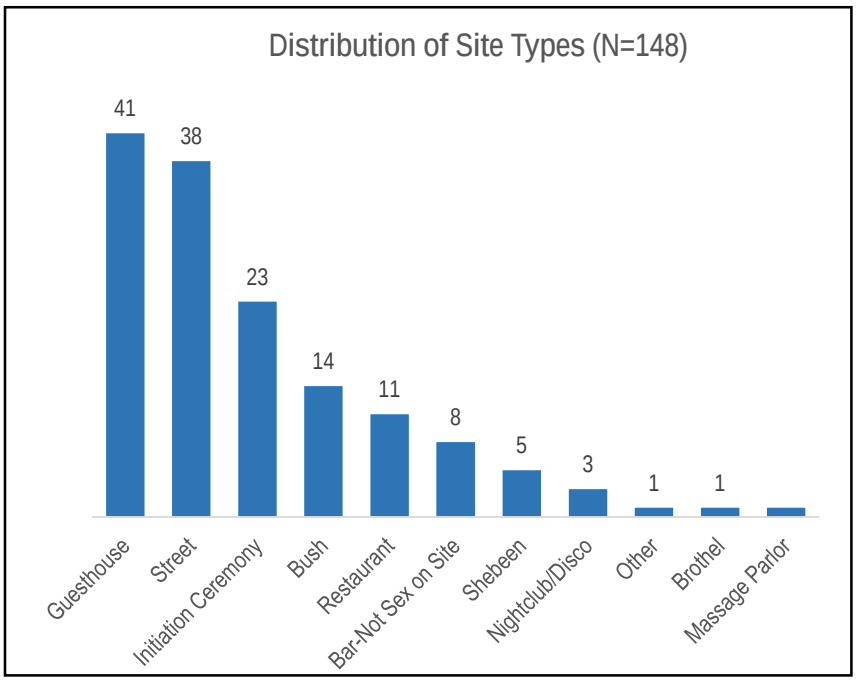
187 community informants interviewed

148 sites estimated

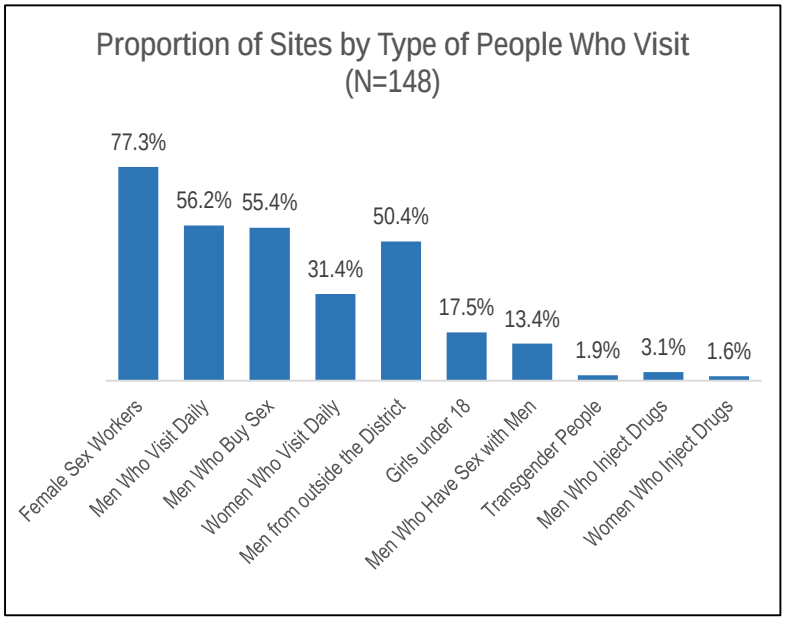
145 sites visited

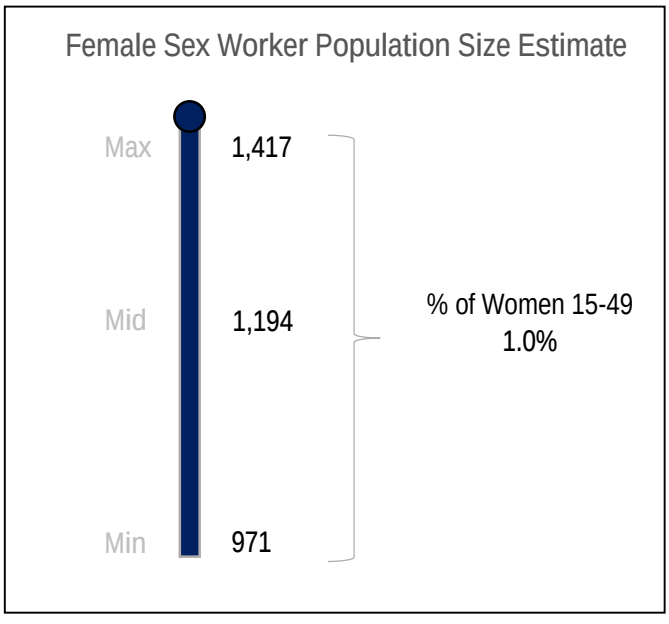
90 general site informants interviewed

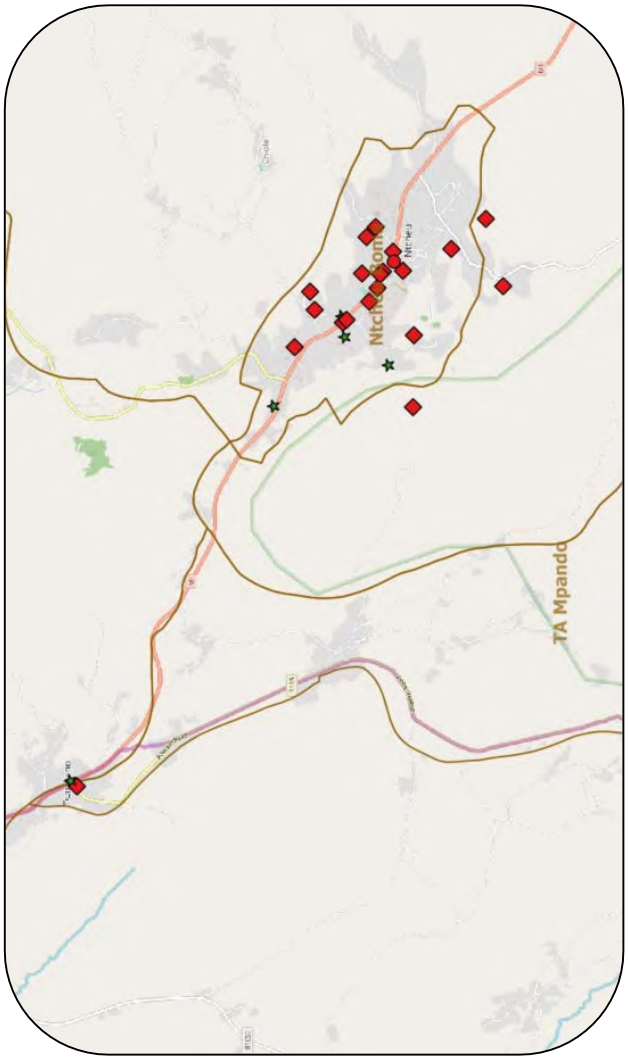
63 female and 90 male patrons and workers interviewed



Who can be reached at PLACE Sites?





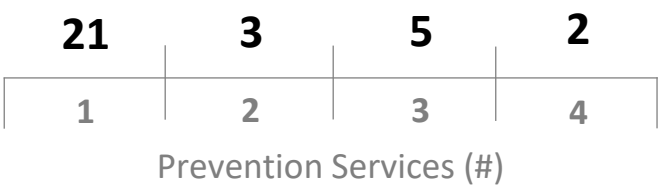


Prevention Services at Visited Sites (n=90)

Type of Service Available at Visited Sites

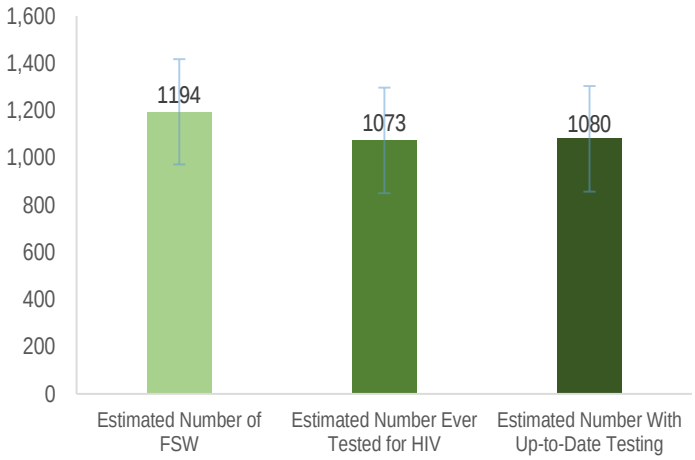
24 Condoms Visible at Time of Visit	**10** Peer Educators Visited (6 Mo)
7 Onsite HIV Testing (6 Mo)	**12** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



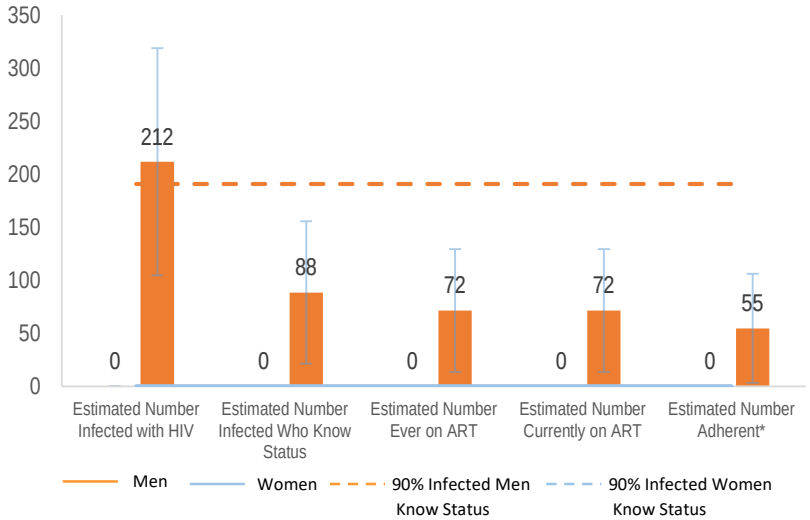
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Kasungu, Malawi

Fieldwork Summary

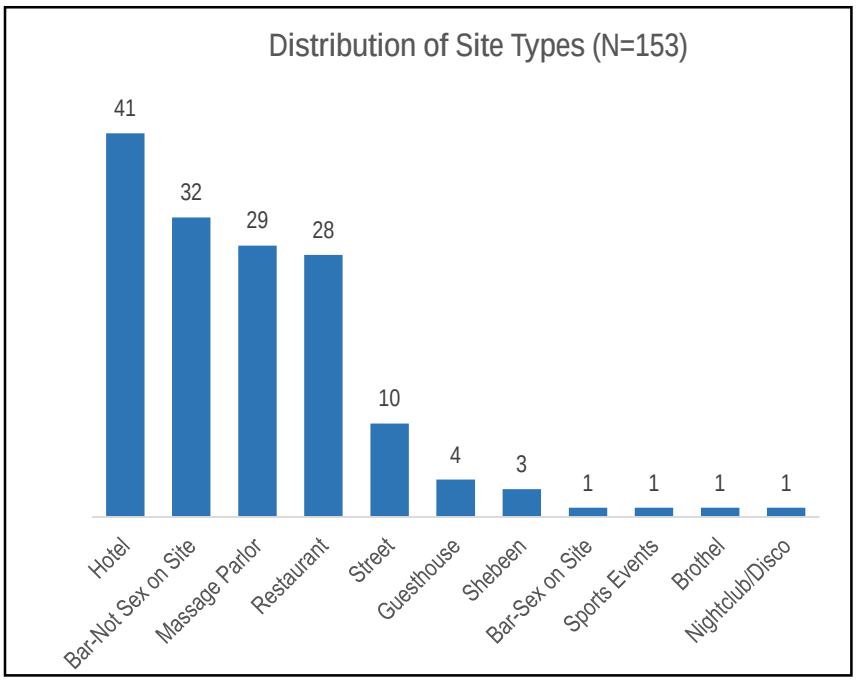
236 community informants interviewed

153 sites estimated

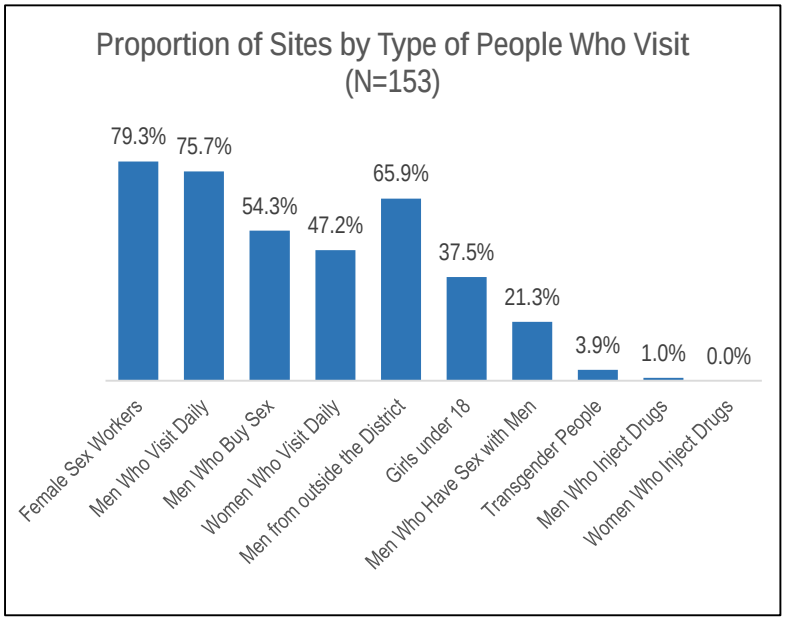
133 sites visited

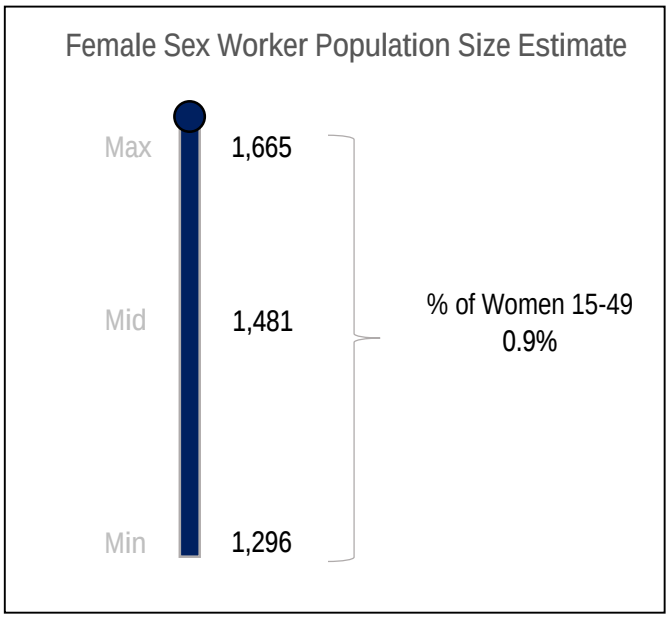
103 general site informants interviewed

110 female and 86 male patrons and workers interviewed



Who can be reached at PLACE Sites?





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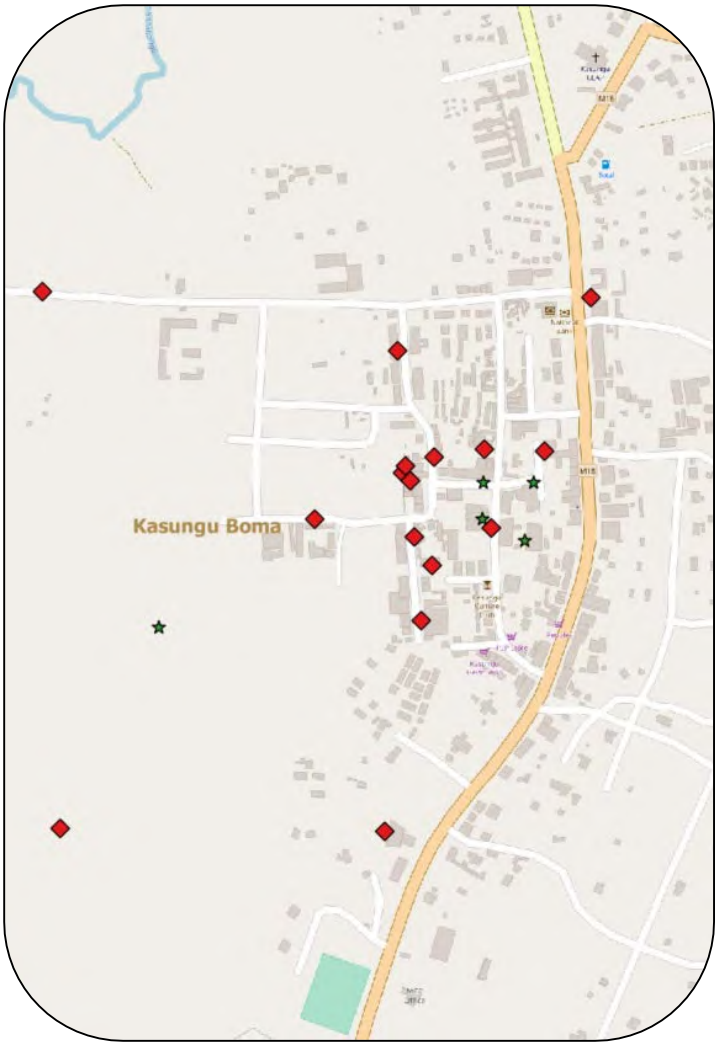
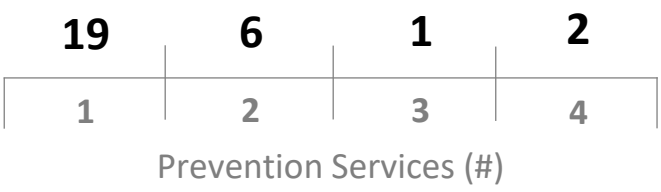


Prevention Services at Visited Sites (n=103)

Type of Service Available at Visited Sites

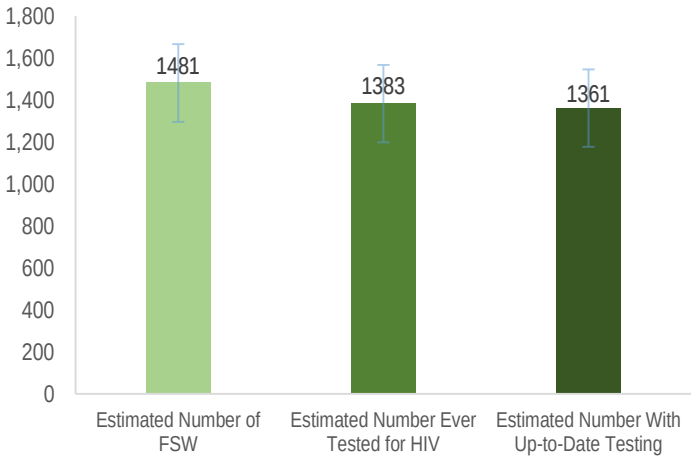
24 Condoms Visible at Time of Visit	**8** Peer Educators Visited (6 Mo)
8 Onsite HIV Testing (6 Mo)	**11** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



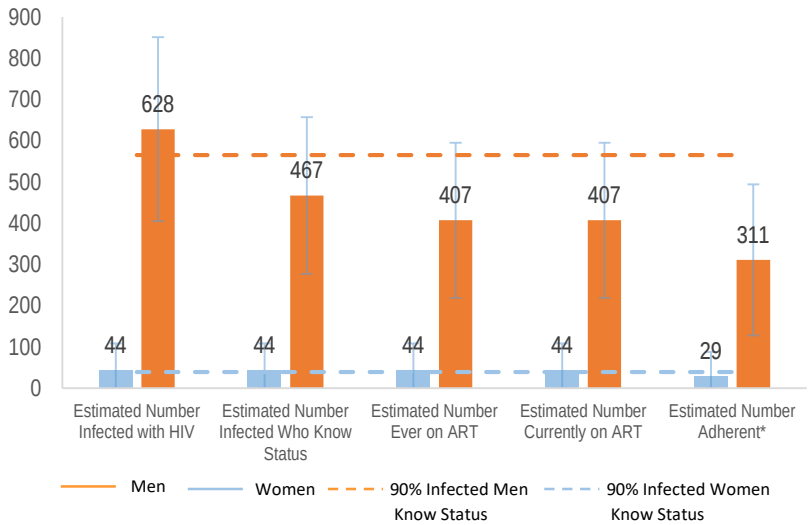
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Mzimba, Malawi

Fieldwork Summary

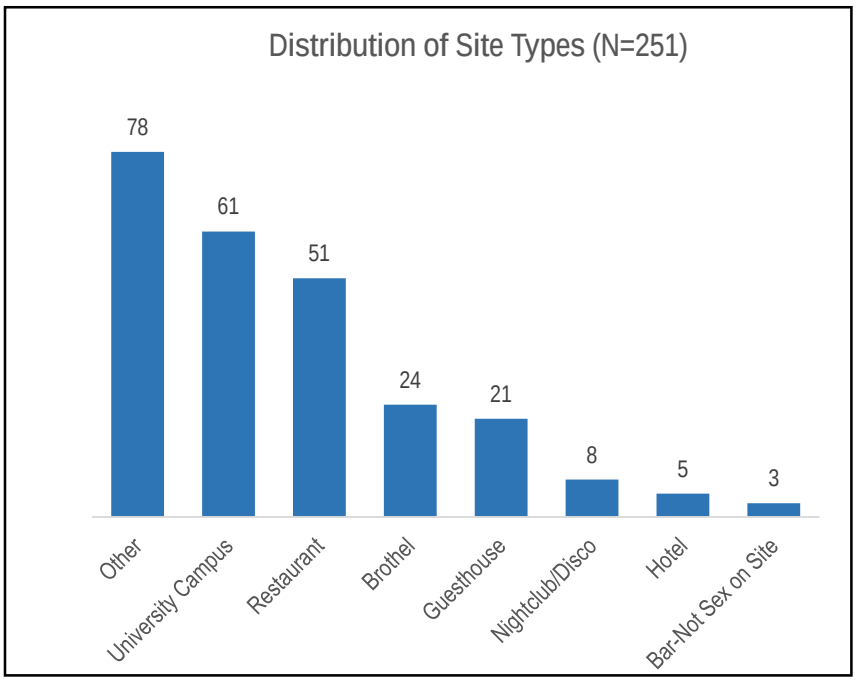
187 community informants interviewed

251 sites estimated

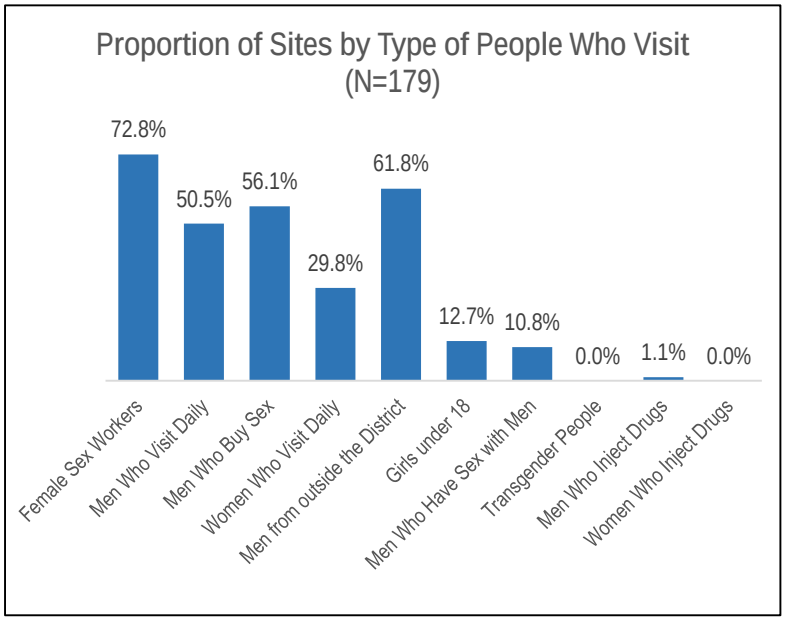
198 sites visited

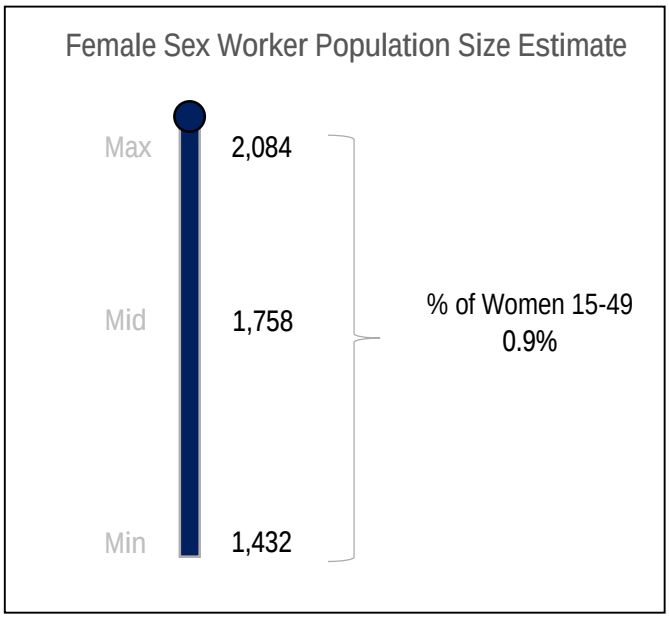
77 general site informants interviewed

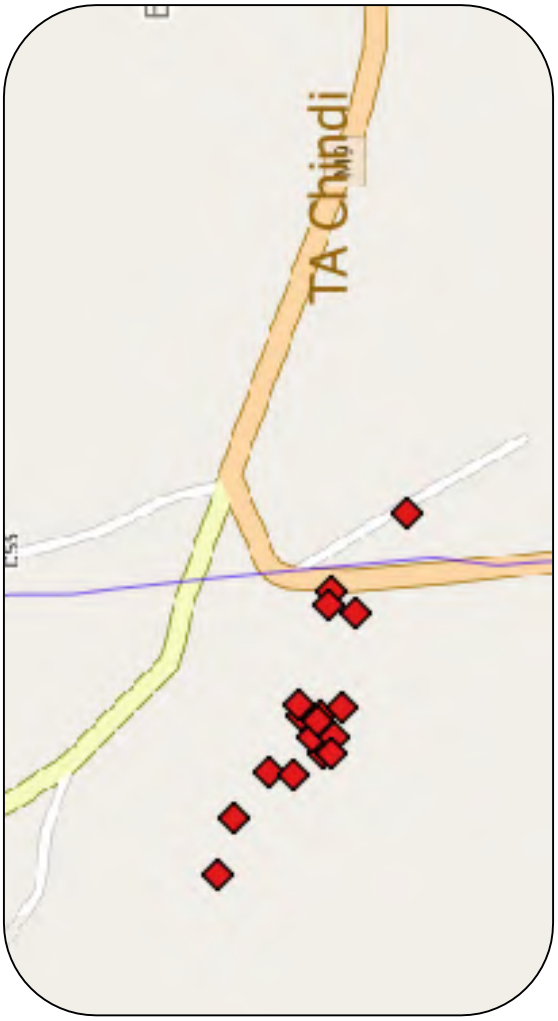
75 female and 79 male patrons and workers interviewed



Who can be reached at PLACE Sites?





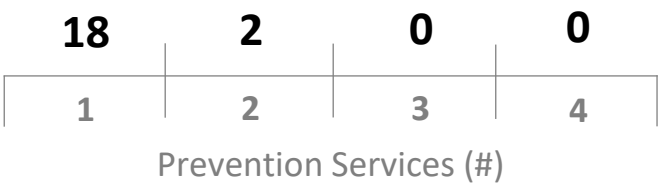


Prevention Services at Visited Sites (n=77)

Type of Service Available at Visited Sites

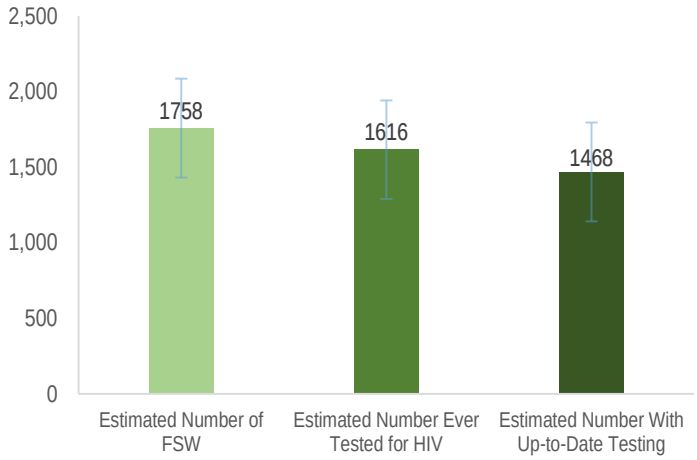
18 Condoms Visible at Time of Visit	**2** Peer Educators Visited (6 Mo)
3 Onsite HIV Testing (6 Mo)	**4** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



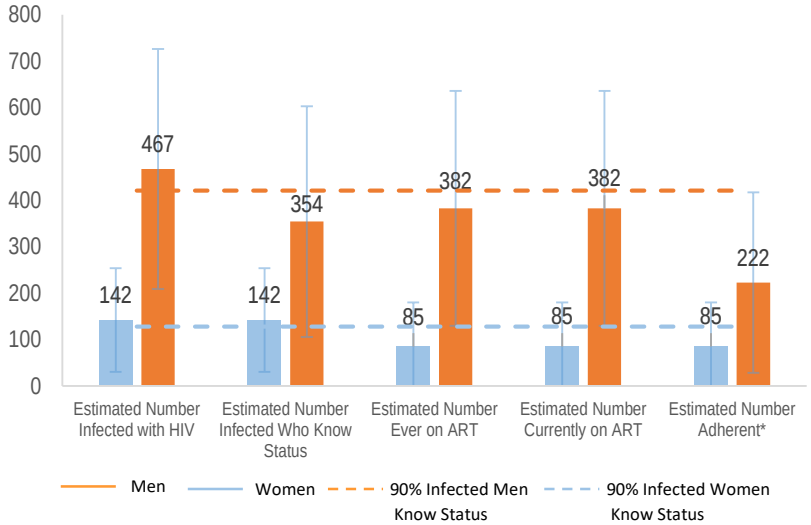
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Chikwawa, Malawi

Fieldwork Summary

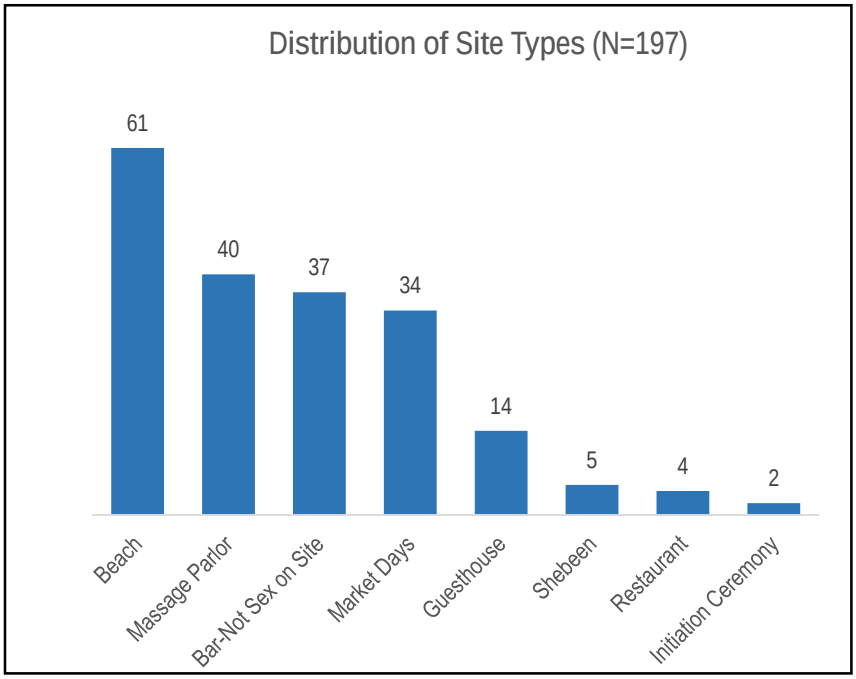
162 community informants interviewed

197 sites estimated

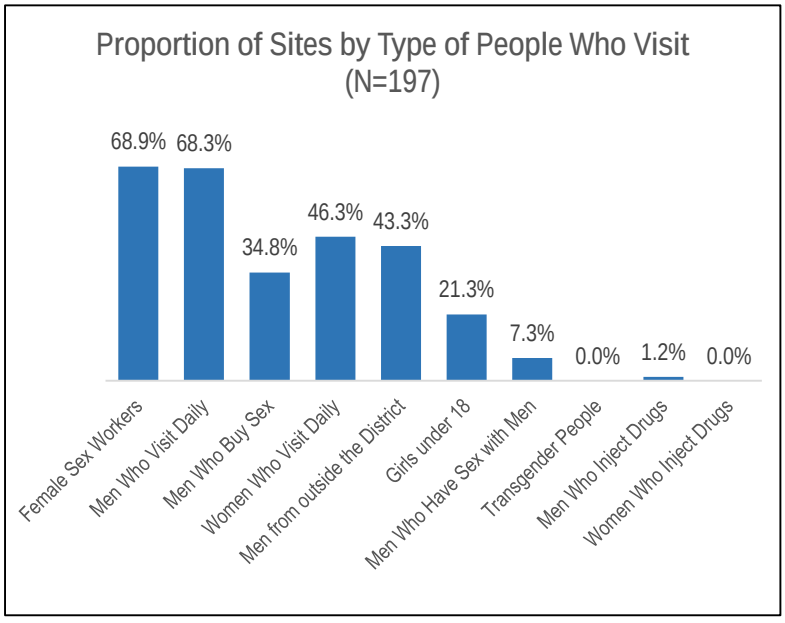
186 sites visited

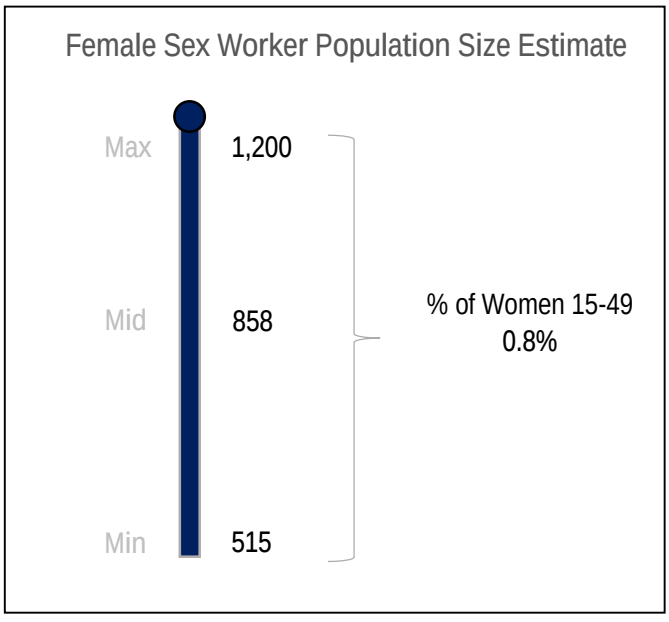
75 general site informants interviewed

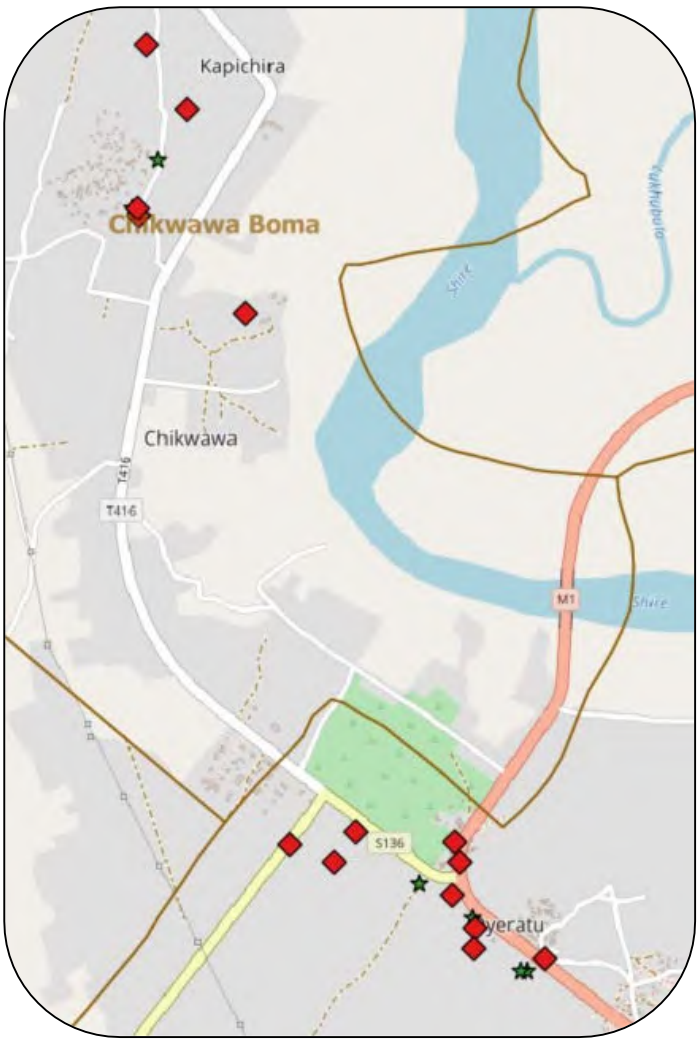
61 female and 178 male patrons and workers interviewed



Who can be reached at PLACE Sites?







Prevention Services at Visited Sites (n=75)

Type of Service Available at Visited Sites

19 Condoms Visible at Time of Visit	**5** Peer Educators Visited (6 Mo)
10 Onsite HIV Testing (6 Mo)	**4** Lube Distributed (6 Mo)

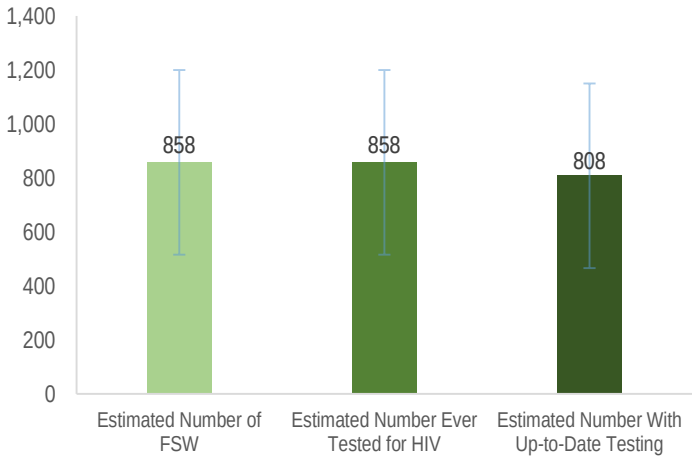
Number of Prevention Services at Visited Sites

1	2	3	4
18	**2**	**4**	**0**

Prevention Services (#)

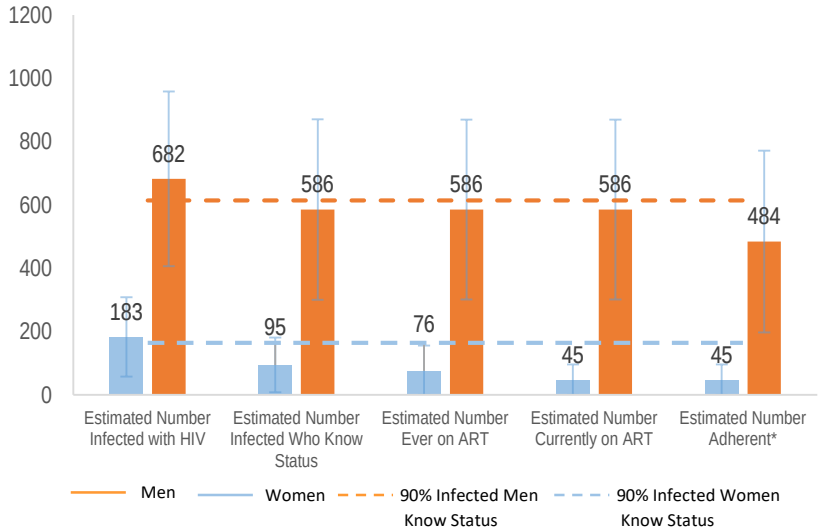
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Neno, Malawi

Fieldwork Summary

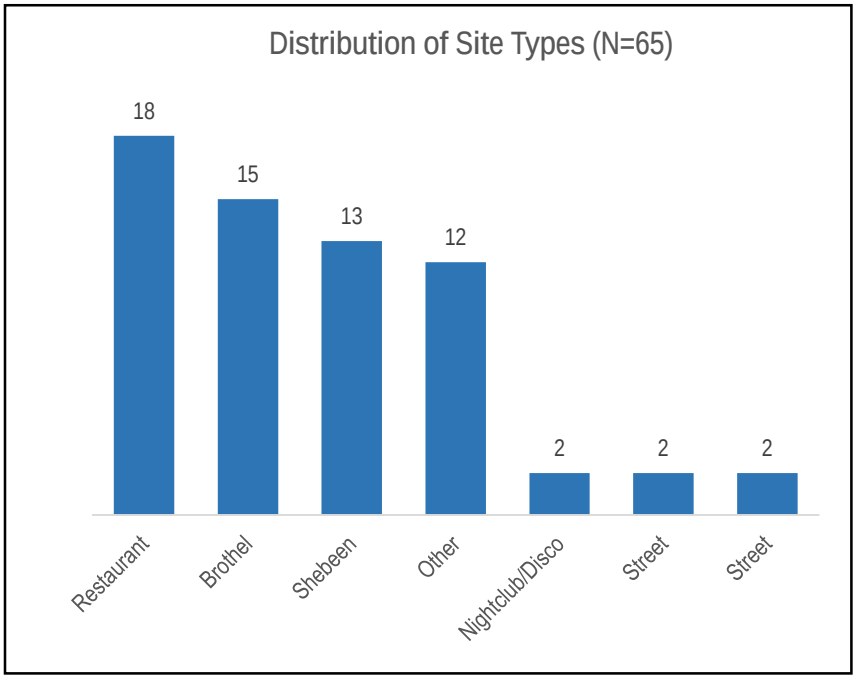
109 community informants interviewed

65 sites estimated

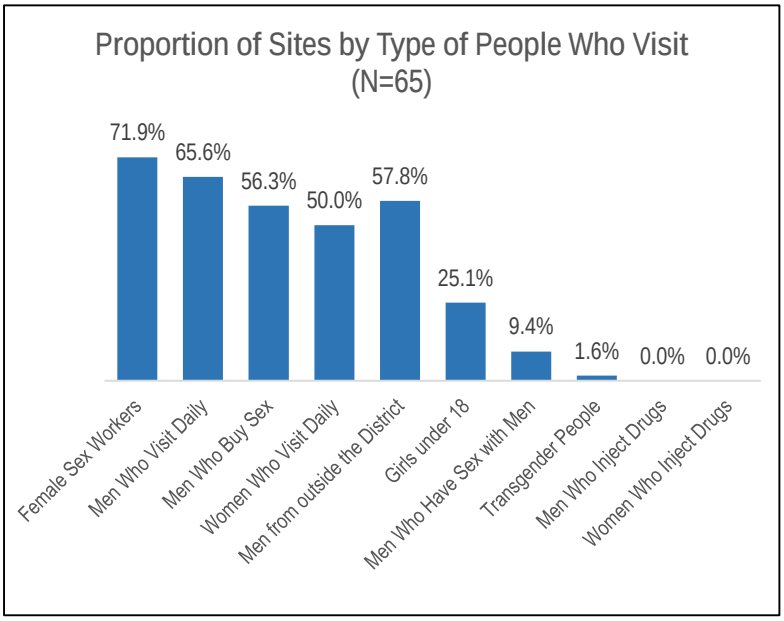
64 sites visited

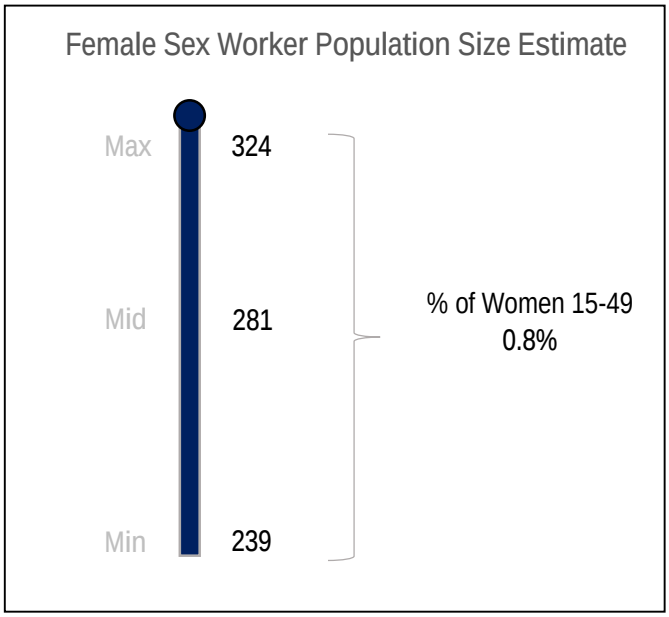
64 general site informants interviewed

60 female and 115 male patrons and workers interviewed



Who can be reached at PLACE Sites?



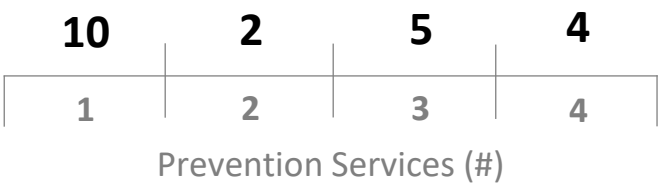


Prevention Services at Visited Sites (n=64)

Type of Service Available at Visited Sites

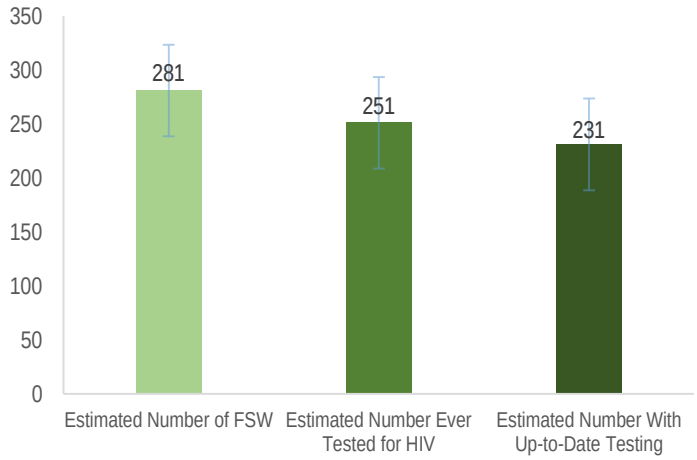
19 Condoms Visible at Time of Visit	**14** Peer Educators Visited (6 Mo)
9 Onsite HIV Testing (6 Mo)	**11** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



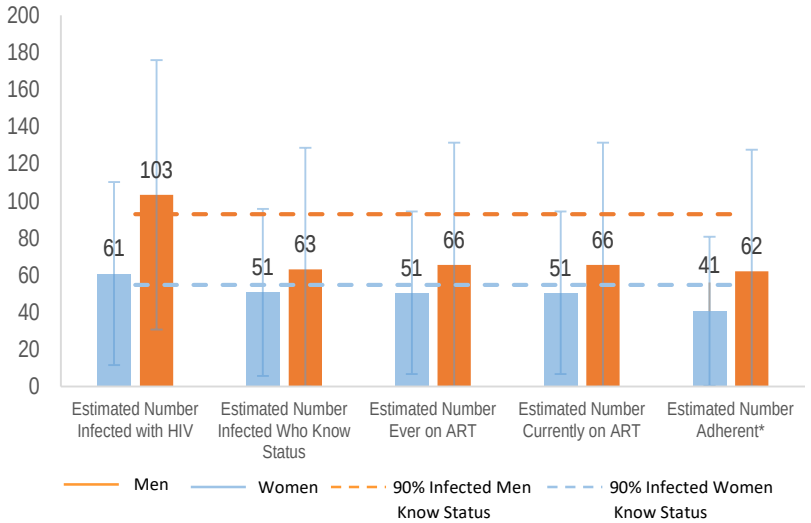
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Mwanza, Malawi

Fieldwork Summary

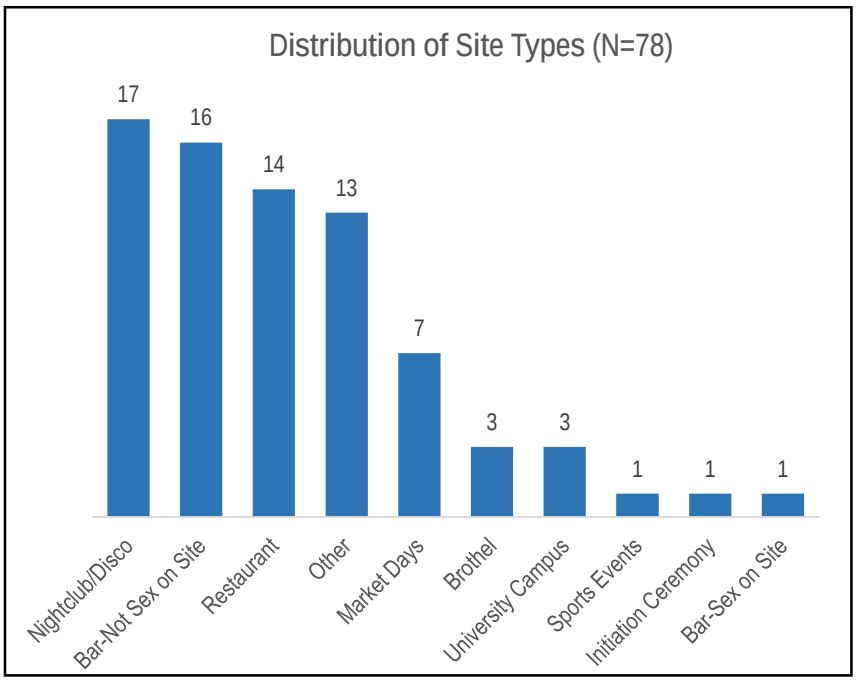
154 community informants interviewed

78 sites estimated

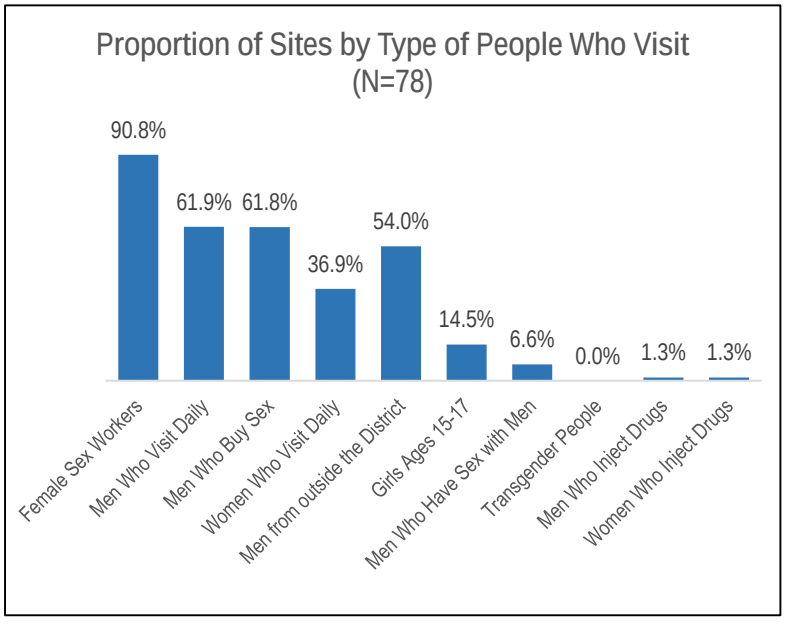
76 sites visited

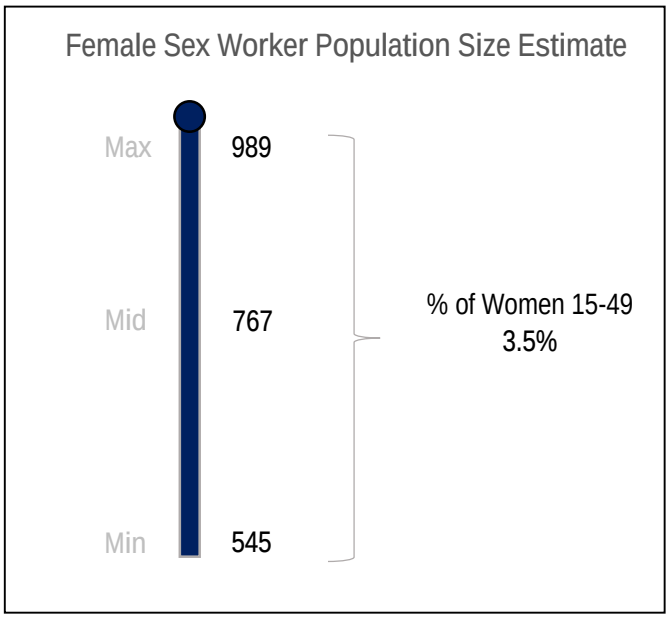
76 general site informants interviewed

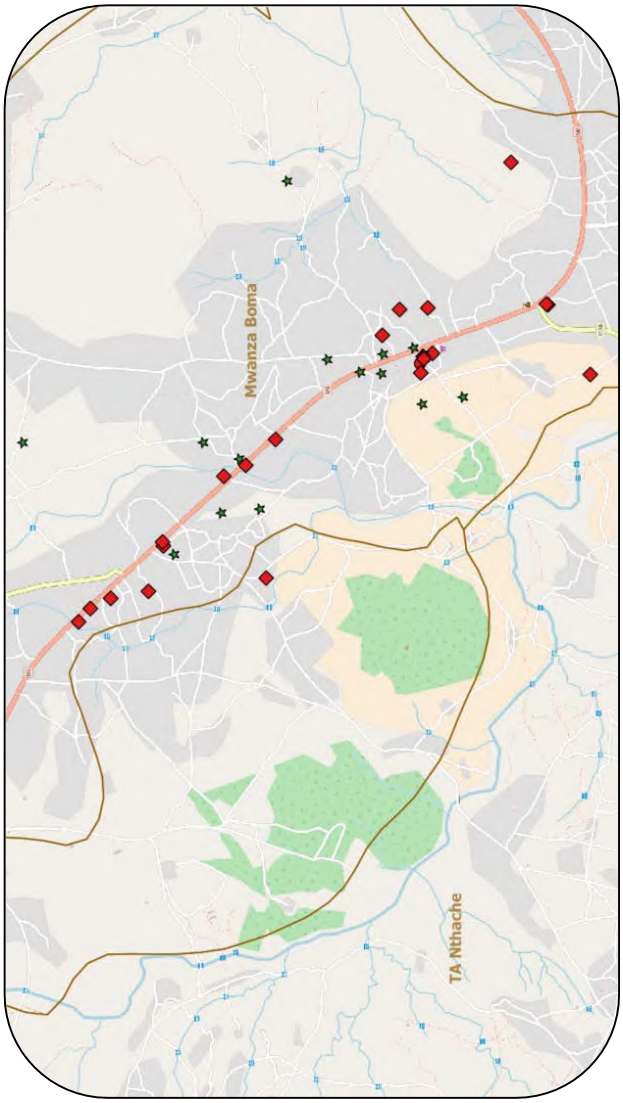
89 female and 62 male patrons and workers interviewed



Who can be reached at PLACE Sites?





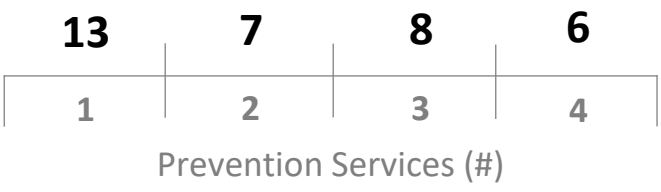


Prevention Services at Visited Sites (n=76)

Type of Service Available at Visited Sites

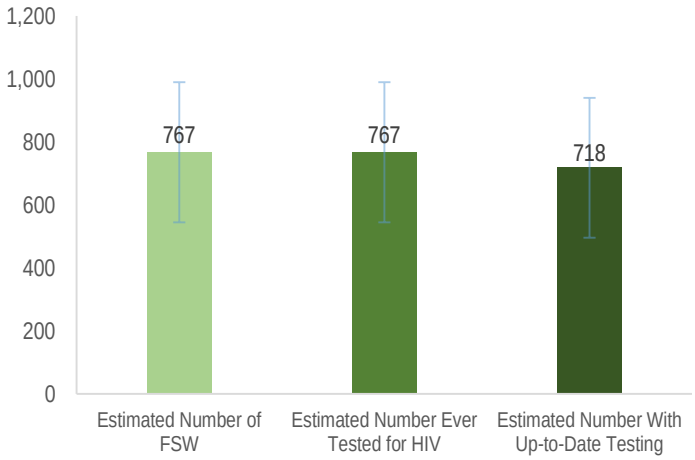
19 Condoms Visible at Time of Visit	**15** Peer Educators Visited (6 Mo)
21 Onsite HIV Testing (6 Mo)	**23** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



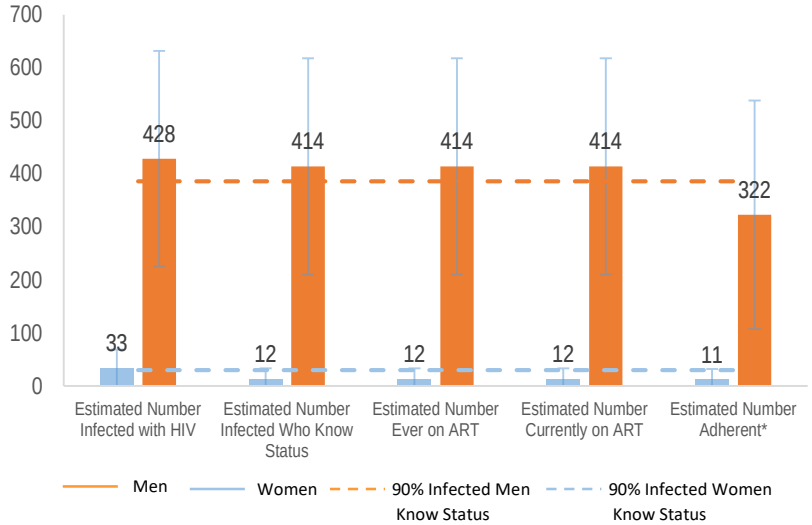
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Karonga, Malawi

Fieldwork Summary

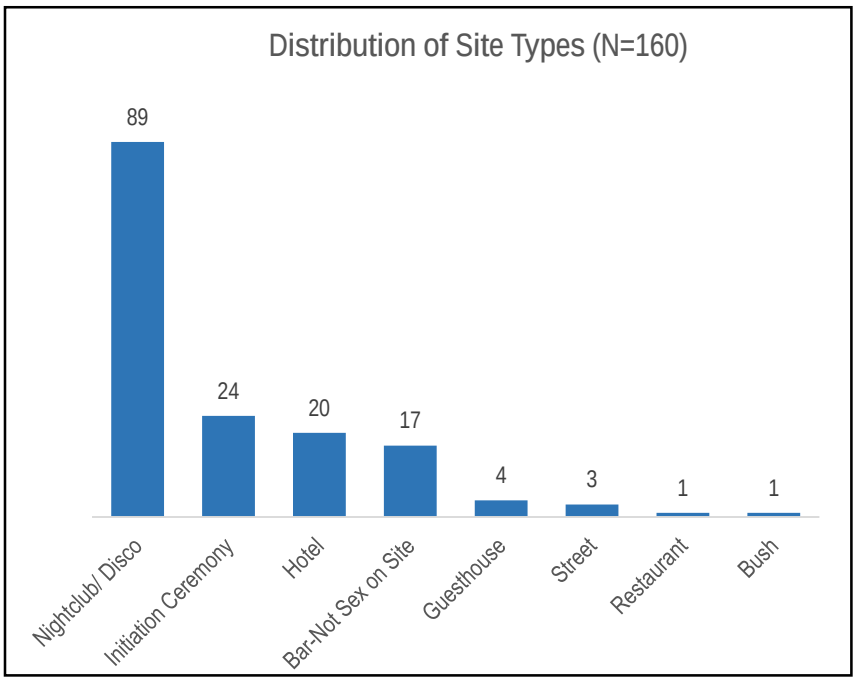
117 community informants interviewed

160 sites estimated

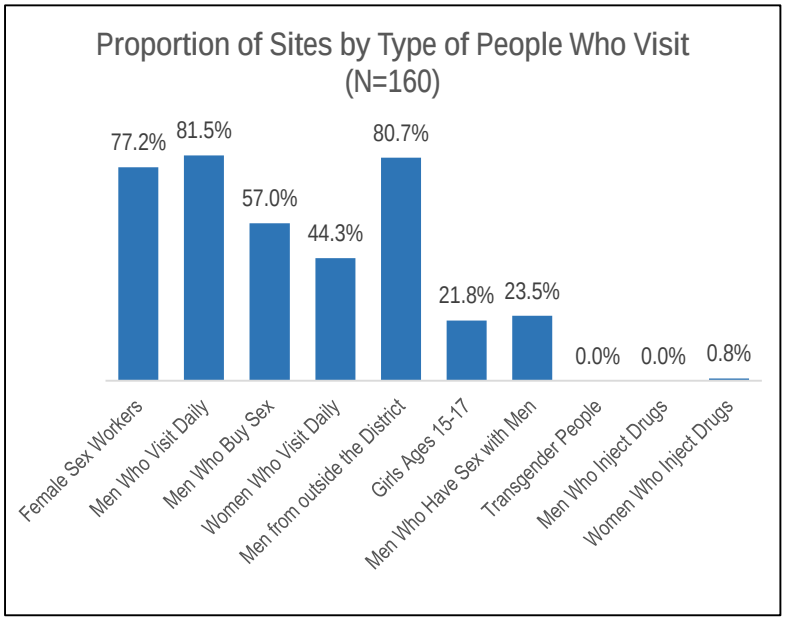
150 sites visited

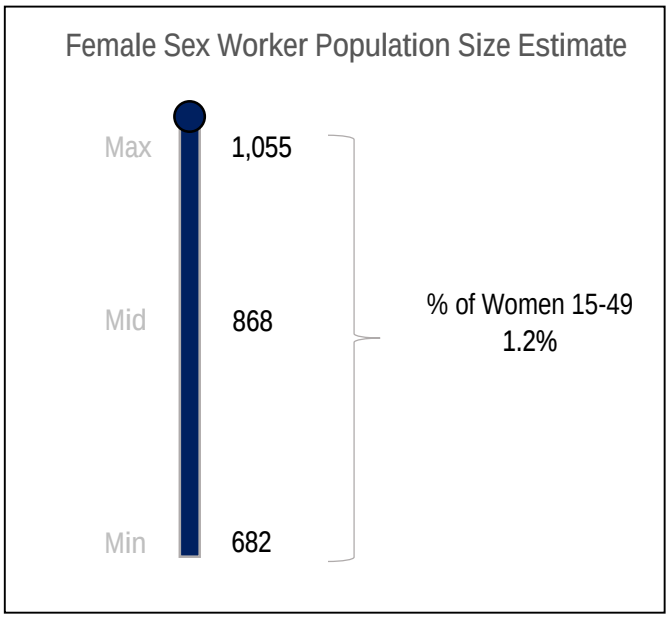
95 general site informants interviewed

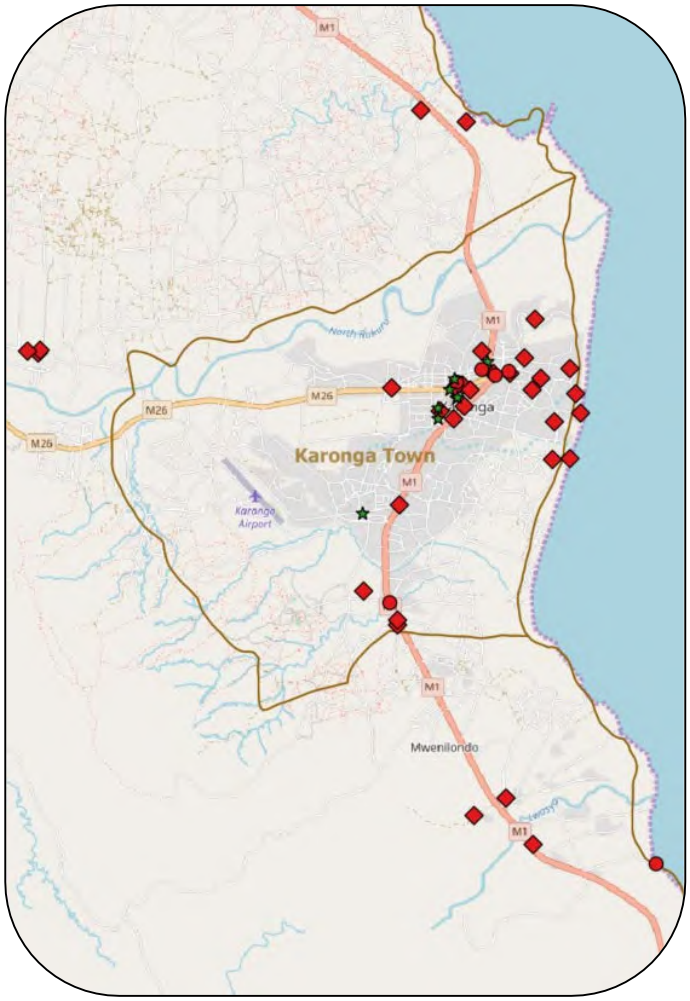
100 female and 142 male patrons and workers interviewed



Who can be reached at PLACE Sites?







Prevention Services at Visited Sites (n=95)

Type of Service Available at Visited Sites

26 Condoms Visible at Time of Visit	**5** Peer Educators Visited (6 Mo)
7 Onsite HIV Testing (6 Mo)	**2** Lube Distributed (6 Mo)

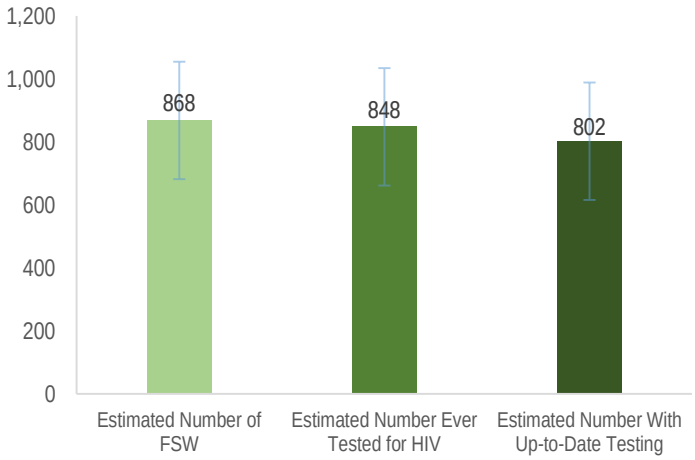
Number of Prevention Services at Visited Sites

1	2	3	4
24	**3**	**2**	**0**

Prevention Services (#)

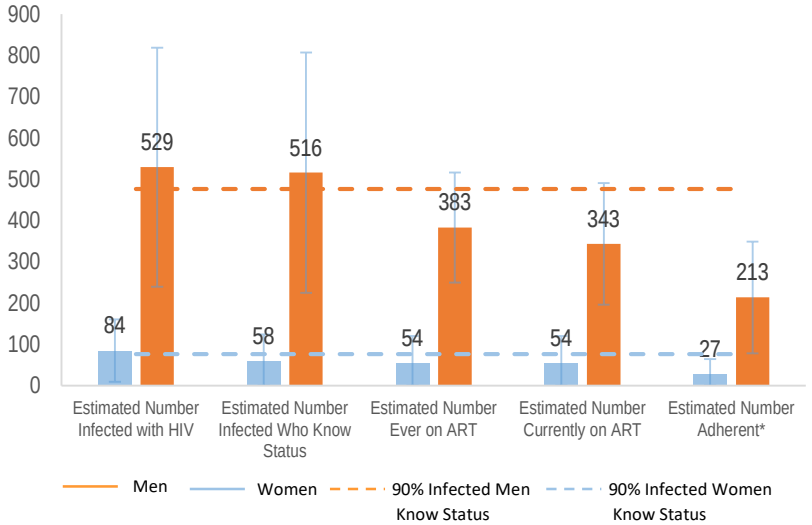
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Dowa, Malawi

Fieldwork Summary

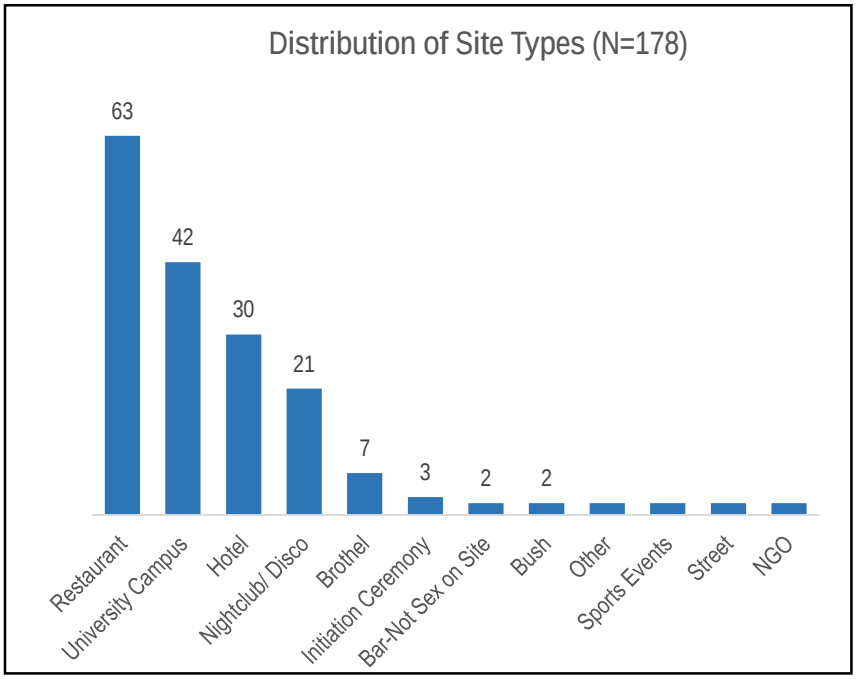
116 community informants interviewed

178 sites estimated

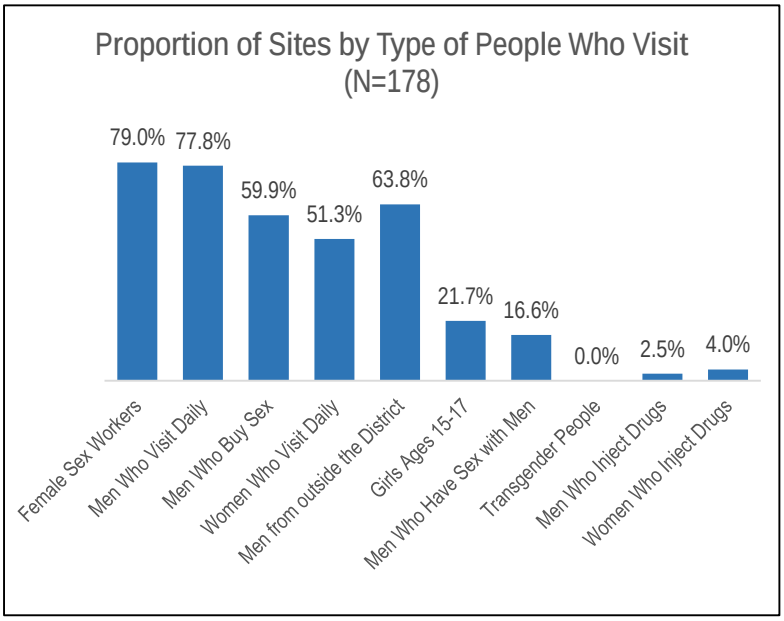
165 sites visited

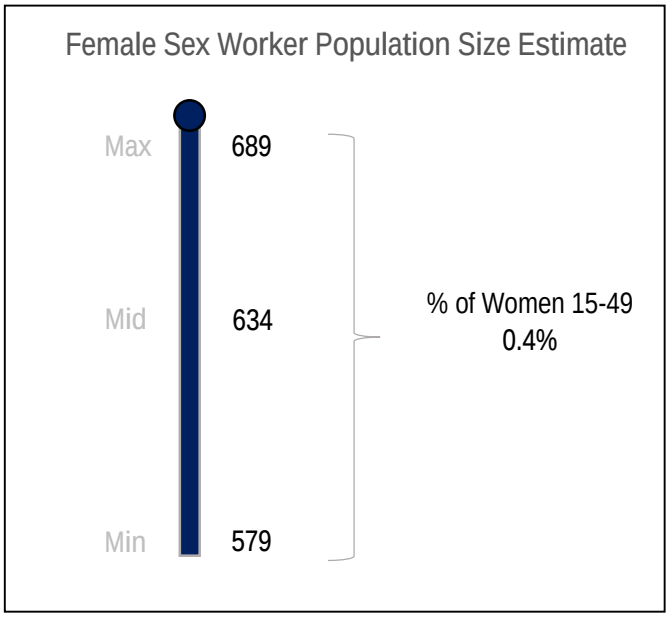
89 general site informants interviewed

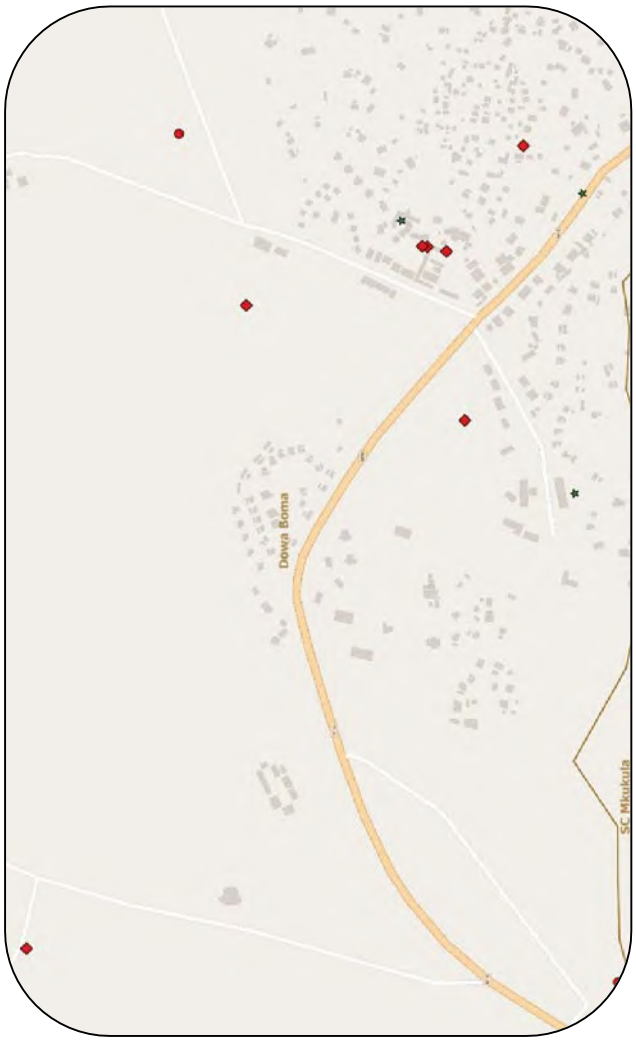
99 female and 88 male patrons and workers interviewed



Who can be reached at PLACE Sites?







Prevention Services at Visited Sites (n=89)

Type of Service Available at Visited Sites

31 Condoms Visible at Time of Visit	**11** Peer Educators Visited (6 Mo)
5 Onsite HIV Testing (6 Mo)	**7** Lube Distributed (6 Mo)

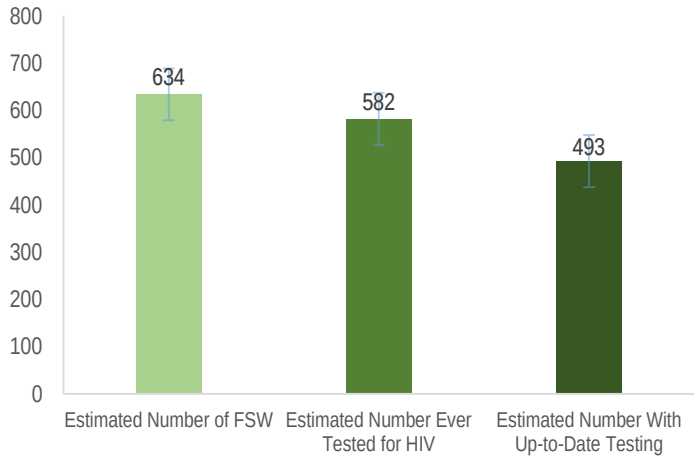
Number of Prevention Services at Visited Sites

1	2	3	4
22	**6**	**2**	**2**

Prevention Services (#)

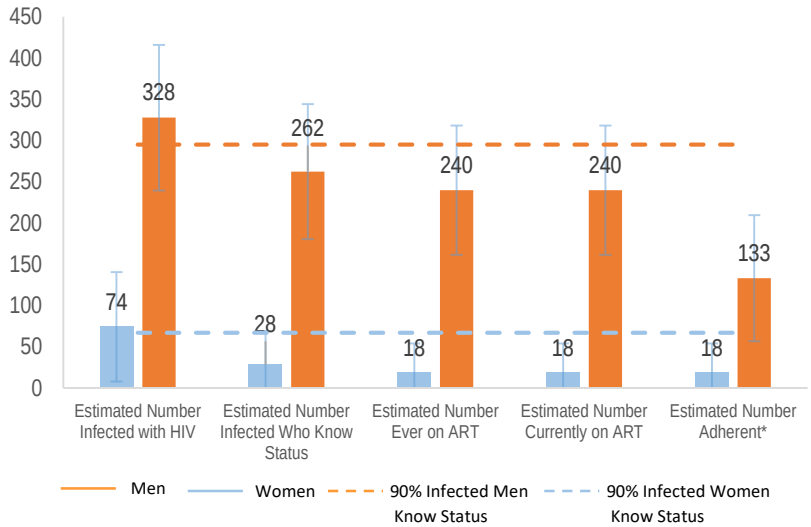
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Nkhata Bay, Malawi

Fieldwork Summary

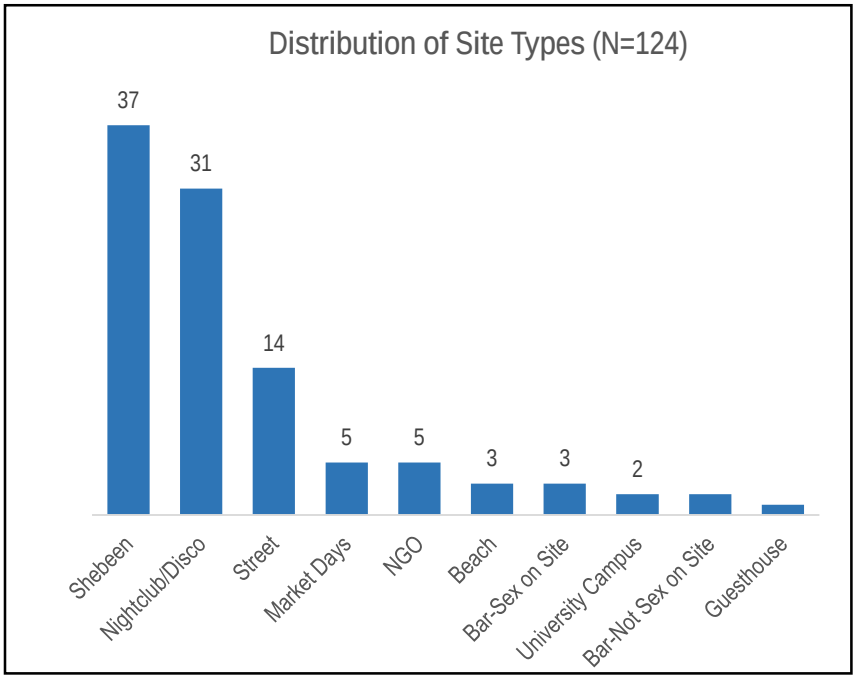
114 community informants interviewed

124 sites estimated

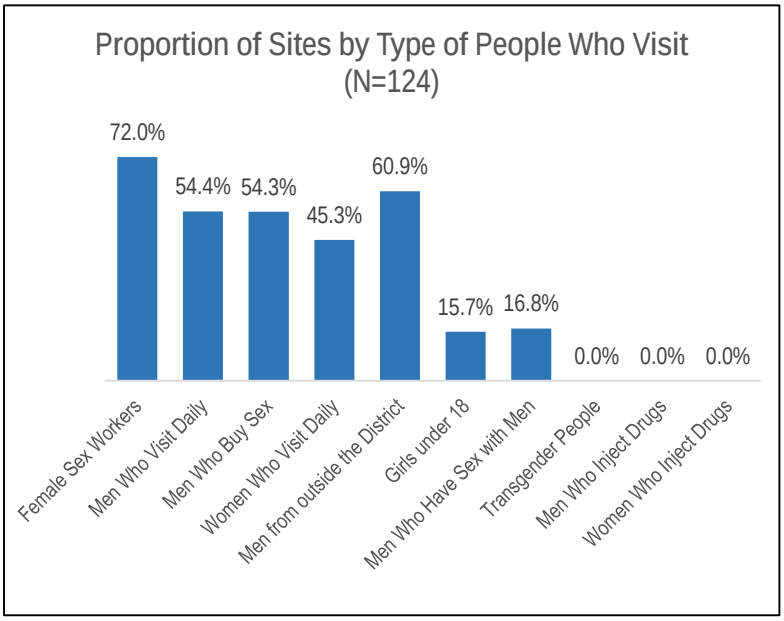
122 sites visited

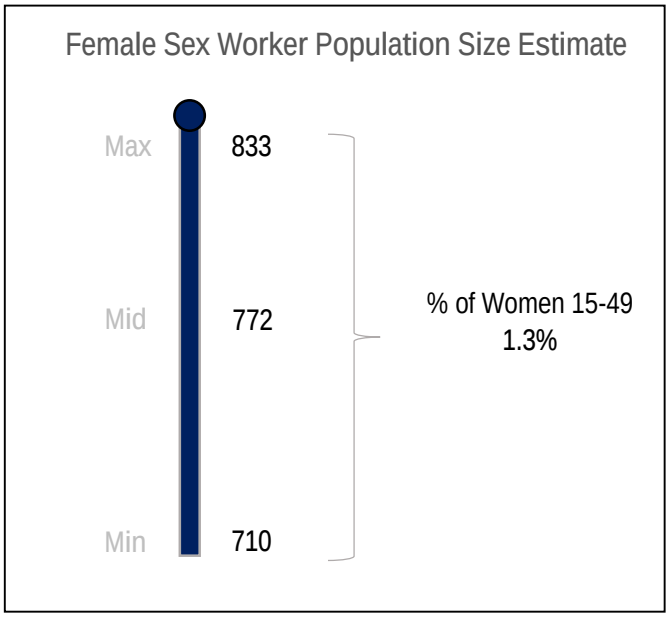
87 general site informants interviewed

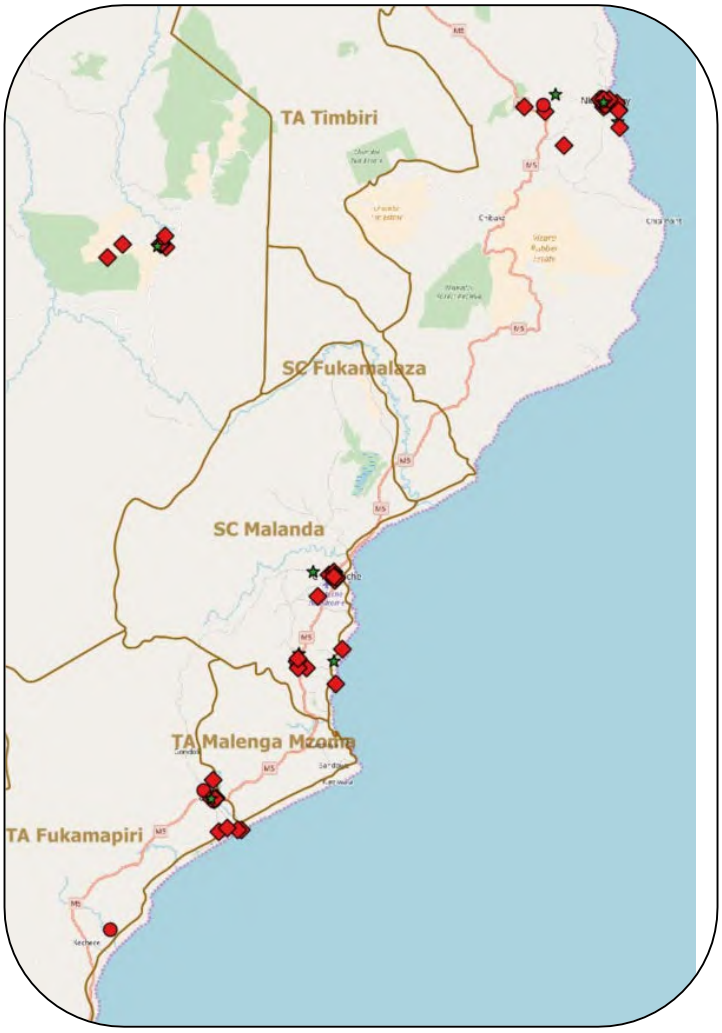
94 female and 143 male patrons and workers interviewed



Who can be reached at PLACE Sites?





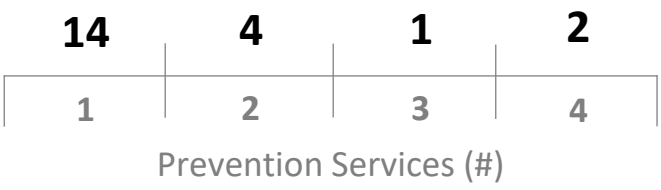


Prevention Services at Visited Sites (n=87)

Type of Service Available at Visited Sites

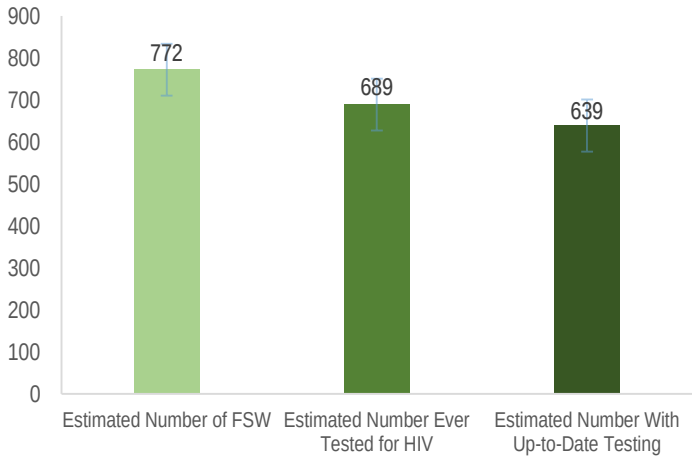
20 Condoms Visible at Time of Visit	**9** Peer Educators Visited (6 Mo)
6 Onsite HIV Testing (6 Mo)	**2** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



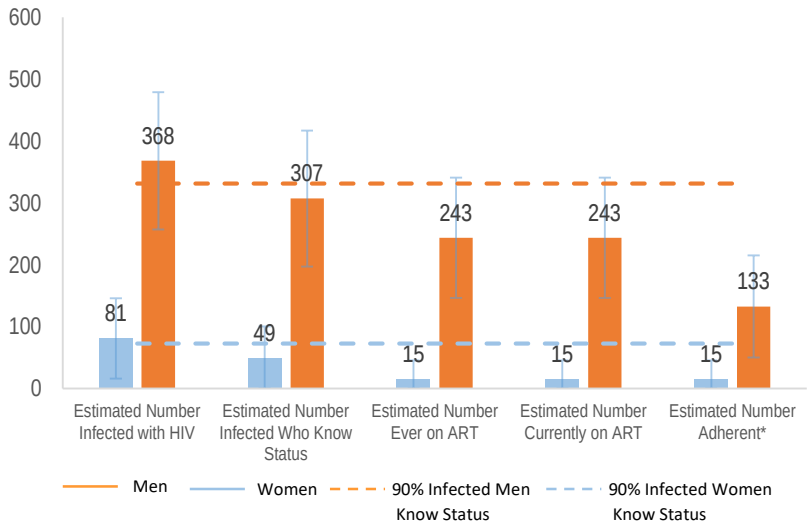
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Mchinji, Malawi

Fieldwork Summary

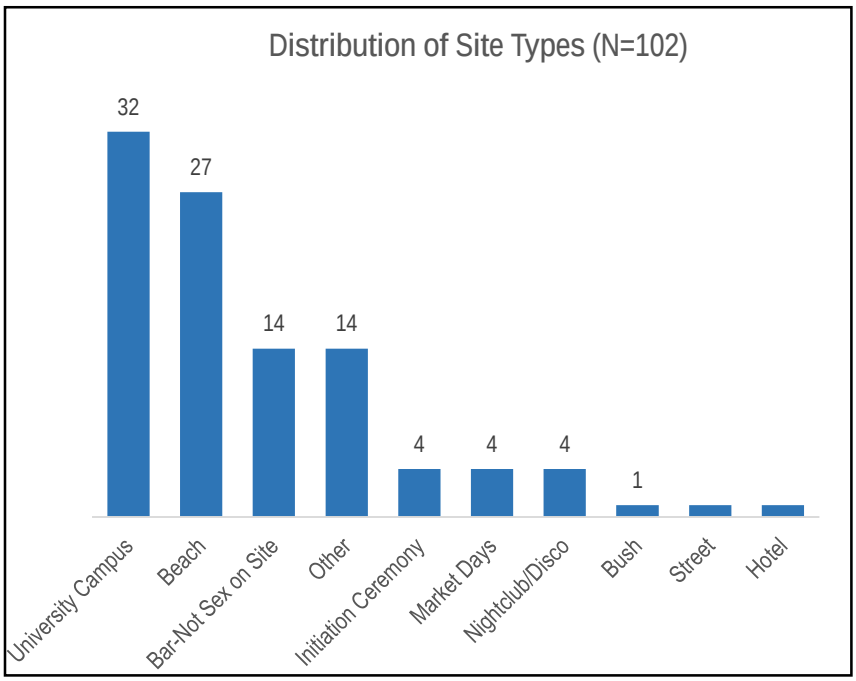
121 community informants interviewed

102 sites estimated

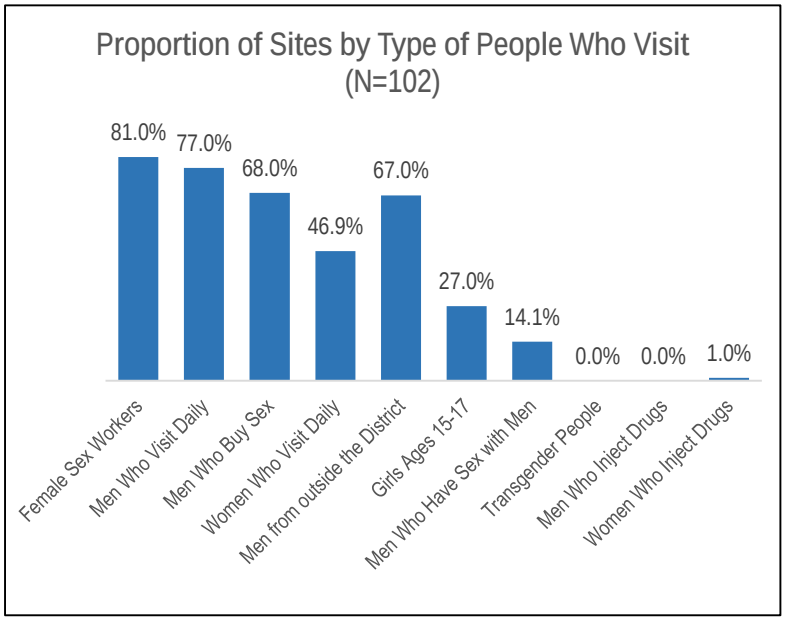
100 sites visited

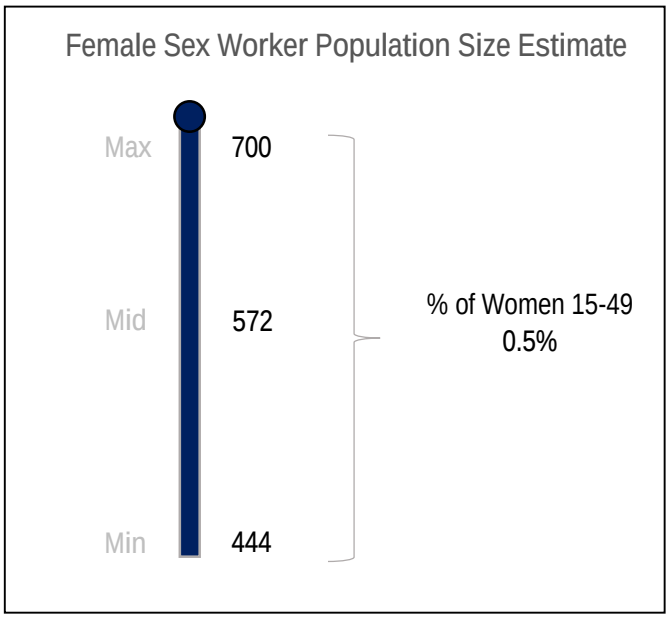
100 general site informants interviewed

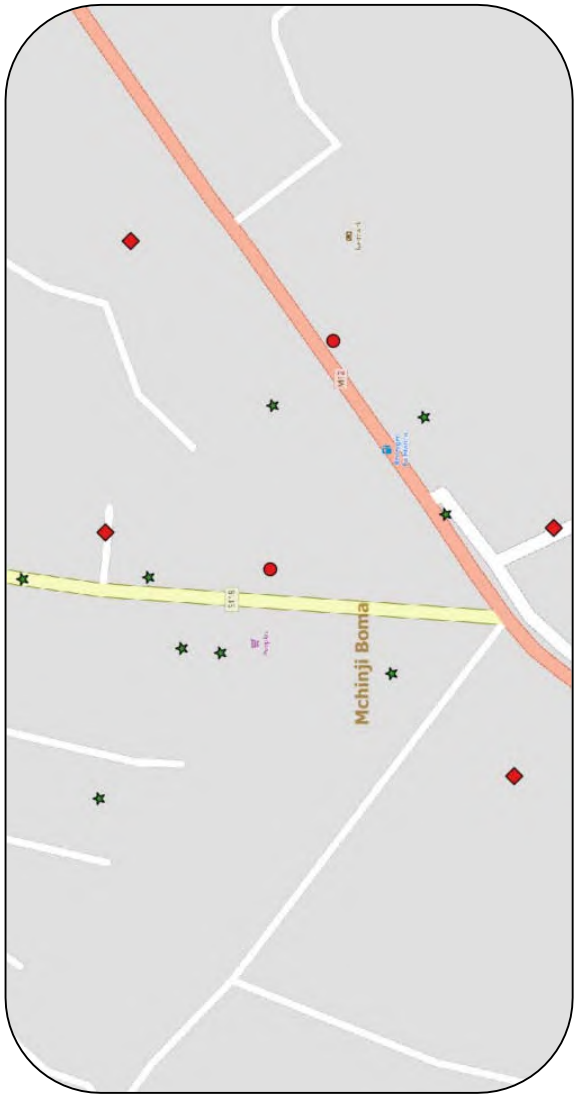
139 female and 136 male patrons and workers interviewed



Who can be reached at PLACE Sites?





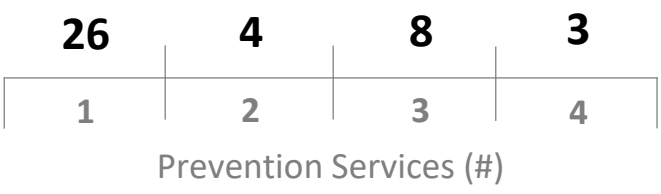


Prevention Services at Visited Sites (n=100)

Type of Service Available at Visited Sites

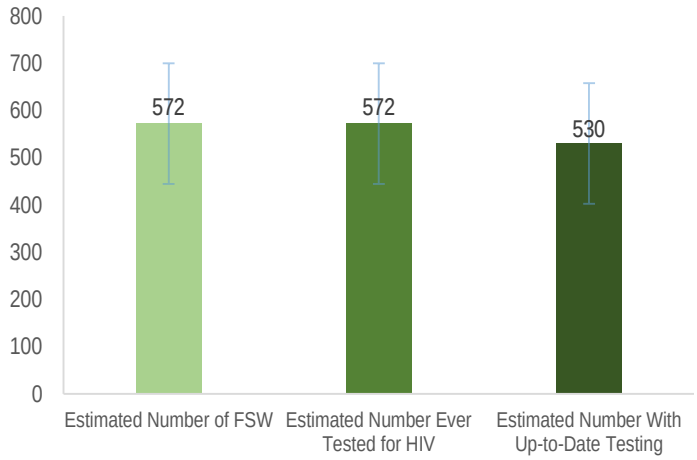
37 Condoms Visible at Time of Visit	**18** Peer Educators Visited (6 Mo)
14 Onsite HIV Testing (6 Mo)	**11** Lube Distributed (6 Mo)

Number of Prevention Services at Visited Sites



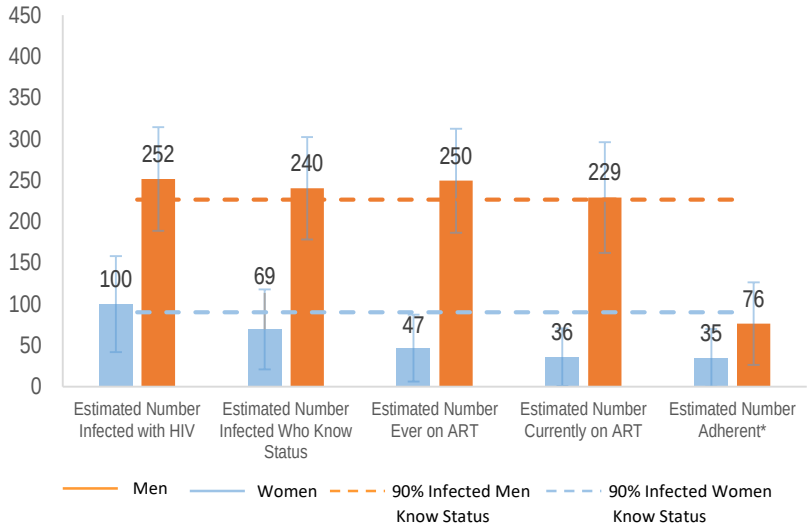
Estimated Prevention Cascade for Female Sex Workers

Estimated # of Individuals and 95% Confidence Intervals



Estimated Treatment Cascade for Venue-Going Men and Women

Estimated # of Individuals and 95% Confidence Intervals



*Adherent defined as taking medication five or more days per week.

Appendix 6: PLACE I Zomba Report

6.1 Overview of the Results from Zomba

Under PLACE I, the only district where people were interviewed at the site at busy times was in Zomba.

6.1.1 Sampling groups

The tables show the findings for:

- a random sample of men
- a random sample of women
- women who reported sex work, either from among the randomly sampled women or those identified by social mobilizers
- all women
- a random sample of men
- MSM

  The percentages are not yet weighted.

6.1.2 Key findings from all participants

Key findings include:

- High unemployment among both groups
- About one-third of FSWs work at the site
- Two-thirds of FSWs live at the site or visit daily
- More men had completed a secondary education than women (36 percent vs. 12 percent).
- More than half of the MSM and FSWs reported visiting the site in order to meet new sexual partners
- Many of the MSM and FSWs reported not having enough food to eat, being a victim of violence, and being hurt by the police.
- Few reported stigma in a health care setting
- Access to services was more limited than reported by the site informants
- Almost 40 percent of MSM and 15 percent of FSWs reported never using a condom
- More than half of the FSWs and almost half of the MSM who reported penile-vaginal sex reported not using a condom the last time they had penile-vaginal sex.
- Most knew where to get an HIV test in Zomba, had been tested prior to the interview, and reported receiving information about HIV or AIDS from the radio, friends, family, or a health care worker.

6.1.3 Female sex workers (FSWs)

Of the 152 women interviewed, 123 (81 percent) of women reported that they identified as a sex worker or had been paid for sex in the past three months.

- The 123 FSWs interviewed at venues in Zomba was much lower than the estimate of 830 FSWs based on site-level data (Table 3.7).
- Most women are highly vulnerable: less than 25 years old (54 percent), have not completed secondary education (89 percent), are unemployed (78 percent), visited more than two sites (64 percent), and visited the venue (where interview occurred) more than four times per week (73 percent).

6.1.4 Men who have sex with men (MSM)

Of the 366 men interviewed, 218 (60 percent) men reported that they had sex with other men.

- The 218 MSM interviewed at venues in Zomba was close to the estimate of 211 MSM based on site-level data (Table 3.8). Since we interviewed more MSM than estimated, the initial site-level estimate is too low for Zomba.
- Many MSM engaged in high risk behaviors: 75 percent were highly mobile, visiting two or more sites the night they were interviewed, 66 percent did not use a condom the last time they had sex with a man, about two-thirds had paid someone and been paid by someone for sex in the past three months.

6.2 Demographics of People Socializing at Sites

Less than one-third of both women and men were employed. Women were less likely to complete secondary school than men, with 12% of women reporting completing secondary school and 36% of men reporting completing secondary school. Twenty six percent of women reported sleeping the previous night at the venue where the interview was conducted and 54% reported sleeping at a family residence. The majority (72%) of men reported sleeping at a family residence the previous night.

Table 6.1 Demographics* As Reported by People Socializing at Sites Who Agreed to Participate

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
Employed	32	21%	12	23%	27	22%	104	28%	42	42%	39	18%
Completed secondary school	18	12%	8	15%	13	11%	132	36%	35	35%	75	34%
Location where you slept last night?												
Venue where interview was conducted	40	26%	13	25%	29	24%	19	5%	9	9%	7	3%
Family residence	82	54%	31	60%	65	53%	264	72%	79	78%	144	66%
Friends' residence	7	5%	2	4%	7	6%	31	8%	4	4%	27	12%
Other	23	15%	6	12%	22	18%	52	14%	9	9%	40	18%
Born female	152	92%	52	100%	123	100%	0	0%	0	0%	0	0%
Identifies as gay or lesbian	11	7%	0	0%	10	8%	145	40%	0	0%	145	67%
Identifies as female	139	91%	52	100%	115	93%	59	16%	1	1%	57	26%
Identifies as male	13	9%	0	0%	8	7%	307	84%	100	99%	161	74%

* Incomplete interview due to refusal or ineligibility by n=15 women, n=25 men.

6.3 Site Visiting Behaviors Among People Socializing at Sites

Women interviewed were more likely to report working at the venue (28%) when compared to men (11%). Approximately 40% of all women and FSW reporting living at the venue. Thirty four percent of all men reported visiting the venue daily or living at the venue. One-third of MSM reported visiting the venue 2-3 times weekly and 31% reported visiting the venue weekly or less frequently. Among FSW, The most common reasons for visiting the venue was to find a sexual partner (86%) and to socialize (78%). While among MSM, the most common reasons for visiting the venue were to socialize (82%) and to drink alcohol (80%). Over 60% of all women and 42% of all men reported meeting a new sexual partner at the venue within the prior 3 months.

Table 6.3 Site Behaviors

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
Work at the venue	43	28%	16	31%	35	28%	41	11%	20	20%	14	6%

Live at the venue	63	41%	21	40%	52	42%	51	14%	20	20%	24	11%
First time at the venue	12	8%	5	10%	8	7%	17	5%	5	5%	10	5%
Frequency visiting venue												
Daily or lives at venue	93	61%	15	29%	79	64%	125	34%	48	48%	59	27%
4-6 times per week	11	7%	17	33%	11	9%	32	9%	9	9%	19	9%
2-3 times per week	14	9%	2	4%	12	10%	99	27%	12	12%	71	33%
Weekly or less frequently	28	18%	16	32%	18	15%	106	29%	31	31%	68	31%
Reason visiting the venue tonight												
Socialize	112	74%	35	67%	96	78%	281	77%	64	63%	179	82%
Drink alcohol	87	57%	27	52%	78	63%	263	72%	63	62%	174	80%
Look for a sexual partner	113	74%	31	60%	106	86%	169	46%	24	24%	132	61%
Work at your job	38	25%	17	33%	33	27%	43	12%	20	20%	12	6%
Visited this venue last Saturday night between 11 p.m. and 1 a.m.	73	48%	27	52%	62	50%	116	32%	25	25%	70	32%
Met a new sexual partner at this venue past 3 months	97	64%	32	62%	91	74%	153	42%	28	28%	105	48%

*For all women, missing n=4 for other places visited today, n=12 for public places visiting later and total place

6.4 Vulnerabilities and Adverse Life Events of People Socializing at Sites

Both men and women, including MSM and FSW, had experienced adverse life events. Nearly 40% of women and 30% of men reported not having enough to eat within the prior 12 months. Approximately 40% of both men and women reported not having enough money within the prior 12 months. Among FSW, 38% reported being victims of violence and 28% forced to have sex. Among MSM, 30% reported being victims of violence and 18% forced to have sex.

Table 6.4. Vulnerabilities and Adverse Life events

	WOMEN						**MEN**					
	All Women		**Randomly Sampled**		**FSW**		**All Men**		**Randomly Sampled**		**MSM**	
Number of Respondents (N)	152		52		123		366		101		218	
Less than 25 years old	79	52%	19	37%	67	54%	213	58%	43	43%	149	68%
Less than secondary education	133	88%	44	85%	110	89%	234	64%	66	65%	143	66%

Unemployed	120	79%	40	77%	96	78%	262	72%	59	58%	179	82%
Experienced in the past 12 months:												
Not enough to eats	55	36%	24	46%	44	36%	106	29%	32	32%	57	26%
Not enough money	67	44%	25	48%	54	44%	148	40%	40	40%	85	39%
Victim of violence	50	33%	15	29%	47	38%	92	25%	19	19%	65	30%
Forced to have sex	38	25%	10	19%	35	28%	49	13%	5	5%	39	18%
Spent one or more nights in jail or prison	26	17%	9	17%	24	20%	68	19%	13	13%	50	23%
Hurt physically by police	12	8%	4	8%	11	9%	34	9%	6	6%	26	12%
Experiences stigma from healthcare worker,	6	4%	1	2%	5	4%	15	4%	2	2%	9	4%
Homeless	12	8%	3	6%	11	9%	28	8%	4	4%	19	9%
Other Indicators of Vulnerabilities and Risk:												
More than 2 venues tonight	86	57%	30	58%	79	64%	230	63%	40	40%	163	75%
Visits site 4+ times per week	104	68%	34	65%	90	73%	157	43%	57	56%	78	36%
Drink alcohol daily/almost daily	38	25%	7	13%	34	28%	107	29%	29	29%	65	30%
Injected non-prescription drugs, past 12 months	2	1%	0	0%	2	2%	4	1%	2	2%	4	2%
Received legal help for violence or stigma, ever	3	2%	1	2%	3	2%	16	4%	4	4%	11	5%

6.5 Sexual Risk Behaviors of People Socializing at Sites

Overall, condom use at last sex with a man was low. Condom use at last sex with a man was reported among 59% of all women and 65% among FSW. Among MSM, only 44% reported using a condom at last sex with a man. Exchanging sex for money was common among MSM, with 67% reporting paying someone for sex and 61% reporting being paid for sex.

Figure 6.5 Sexual Risk Behaviors of People Socializing at Sites

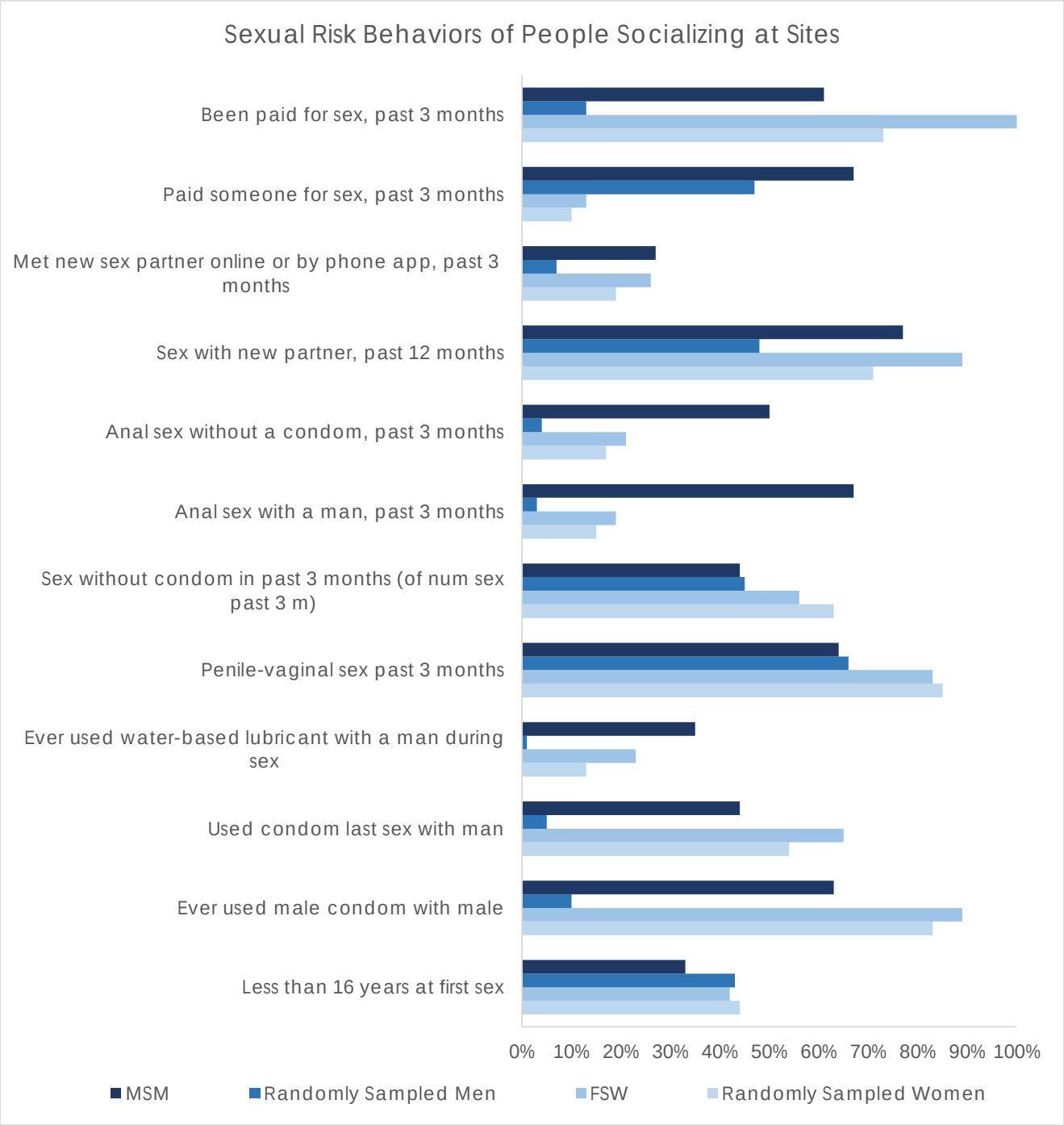


Table 6.5 Sexual Risk Behaviors

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
Less than 16 years at first sex	64	42%	23	44%	51	42%	131	36%	43	43%	73	33%
Ever used male condom with male	126	83%	43	83%	110	89%	137	37%	10	10%	137	63%
Used condom last sex with man	90	59%	28	54%	80	65%	96	26%	5	5%	96	44%
Ever used water-based lubricant with a man	28	18%	7	13%	28	23%	77	21%	1	1%	77	35%
Penile-vaginal sex past 3 months	124	82%	44	85%	102	83%	260	71%	67	66%	139	64%
Sex without condom in past 3 months (of num sex past 3 m)	86	57%	33	63%	69	56%	182	50%	45	45%	95	44%
Anal sex with a man, past 3 months	25	16%	8	15%	23	19%	145	40%	3	3%	145	67%
Anal sex without a condom, past 3 months	28	18%	9	17%	26	21%	108	30%	4	4%	108	50%
Sex with new partner, past 12 months	122	80%	37	71%	110	89%	247	67%	48	48%	167	77%
Met new sex partner online or by phone app, past 3 months	32	21%	10	19%	32	26%	70	19%	7	7%	58	27%
Paid someone for sex, past 3 months	17	11%	5	10%	16	13%	217	59%	47	47%	146	67%
Been paid for sex, past 3 months	123	80%	38	73%	123	100 %	144	39%	13	13%	133	61%
Sex partners, past 4 weeks												
None	8	5%	3	6%	4	3%	39	11%	17	17%	7	3%
One	29	19%	14	27%	15	12%	93	25%	40	40%	27	12%
2-5	26	17%	8	15%	26	21%	121	33%	17	17%	83	38%
6+	31	20%	9	17%	30	24%	59	16%	3	3%	54	25%
NEW sex partners, past 4 weeks												
None	38	25%	19	37%	21	17%	127	35%	55	54%	34	16%
One	15	10%	6	12%	14	11%	78	21%	11	11%	51	23%
2-5	22	14%	3	6%	22	18%	98	27%	10	10%	79	36%

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
6+	17	11%	6	12%	17	14%	8	2%	1	1%	6	3%
Sex partners, past 12 months												
None	13	9%	4	8%	7	6%	30	8%	16	16%	7	3%
One	14	9%	9	17%	2	2%	39	11%	20	20%	8	4%
2-5	23	15%	11	21%	17	14%	75	20%	25	25%	32	15%
6+	58	38%	15	29%	57	46%	158	43%	12	12%	125	57%

6.6 Exposure of Programs of People Socializing at Sites

Overall, the majority of women and men received information about HIV or AIDS in the prior 12 months. The most common sources of information for both men and women included the radio, a friend or family member, and a nurse. Only 38% of women and 20% of men had a condom at the time of the interview. Nearly all women (91%) and men (91%) reported knowing where to get tested for HIV in Zomba District.

Table 6.6 Exposure to Programs

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
Gets health or other services from programs designed for people who inject drugs	3	2%	1	2%	3	2%	2	1%	1	1%	0	0%
In the past 12 months, have you received information about HIV or AIDS from…												
An outreach worker at this spot?	69	45%	19	37%	58	47%	102	28%	25	25%	64	29%
The radio?	136	89%	44	85%	110	89%	355	97%	96	95%	213	98%
A friend or family member?	128	84%	40	77%	107	87%	330	90%	86	85%	200	92%
A nurse?	125	82%	40	77%	107	87%	288	79%	73	72%	175	80%
A doctor?	103	68%	34	65%	87	71%	252	69%	62	61%	152	70%
A person at a drop-in center?	46	30%	12	23%	43	35%	82	22%	19	19%	64	29%
Accessibility of Services												
Can get condom quickly	36	24%	12	23%	29	24%	107	29%	29	29%	75	34%
Can get lubricant quickly	89	59%	33	63%	74	60%	232	63%	66	65%	144	66%
Obtained free condoms in the past 6 months	110	72%	33	63%	98	80%	210	57%	48	48%	137	63%

Condom from an outreach worker in the past 6 months	75	49%	21	40%	72	59%	95	26%	15	15%	74	34%
Bought condoms in the past 6 months	122	80%	39	75%	106	86%	260	71%	59	58%	169	78%
Has condom now, shown to interviewer	57	38%	19	37%	52	42%	73	20%	21	21%	43	20%
Obtained free lubricant in the past 6 months	42	28%	8	15%	42	34%	33	9%	86	85%	31	14%
Knows where to get tested for HIV in Zomba District	138	91%	44	85%	113	92%	332	91%	25	25%	196	90%

6.7 HIV Prevalence of People Socializing at Sites

Overall, 117 (23 percent) of the 518 participants who were interviewed were HIV-positive. More than half (n=64, 56 percent) knew that they were HIV-infected. More women than men were HIV-positive, but more HIV+ women reported that they knew their status.

6.7.1 HIV Prevalence among Women

- Most women (n=123, 81 percent) identified themselves as sex workers or had been paid for sex in the past three months.
- Female sex workers had a higher HIV prevalence (55%) compared to women who were randomly sampled (48%).
- More than one-third of HIV-positive women were identified by PLACE.

6.7.1 HIV Prevalence among Men

- Most men (n=218, 60 percent) reported having sex with other men.
- HIV prevalence was lower among men who reported having sex with other men compared to randomly sampled men and the entire sample of men.
- Among HIV+ men, most reported that they were not HIV+ (n=23, 56 percent).
- More than half of HIV-positive men were identified by PLACE.

Table 6.7 HIV Prevalence

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
HIV Positive	76	50%	25	48%	68	55%	41	11%	14	14%	15	7%
Self-Identified	46	61%	16	64%	42	62%	18	44%	7	50%	7	47%
New Diagnosis by PLACE	30	39%	9	36%	26	38%	23	56%	7	50%	8	53%

6.8 HIV Treatment Cascade of People Socializing at Sites

Among all women, 69% had tested for HIV and received results in the past 6 months and 30% self-identified as HIV positive. Approximately one-quarter reported currently taking ART. Of those currently on ART, 77% were virally suppressed. Among all men, 54% had tested for HIV and received results in the past 6 months and 5% self-identified as HIV positive. Three percent reported currently taking ART. Of those currently on ART, 80% were virally suppressed.

Table 6.8 HIV Treatment Cascade of People Socializing at Sites

	WOMEN						MEN					
	All Women		Randomly Sampled		FSWs		All Men		Randomly Sampled		MSM	
Number of Respondents (N)	152		52		123		366		101		218	
Before today, ever tested for HIV and received test results	130	86%	42	81%	105	85%	264	72%	75	74%		72%
In the past 6 months, tested for HIV and received test results (besides today)	105	69%	36	69%	90	73%	199	54%	48	48%	120	55%
HIV positive in the past year or before, self-identified	46	30%	16	31%	42	34%	18	5%	7	7%	7	3%
Taken medicine for an HIV infection	39	26%	14	27%	36	29%	11	3%	5	5%	4	2%
Currently taking antiretroviral (ART) drugs to treat an infection	39	26%	14	27%	36	29%	10	3%	5	5%	4	2%
Taking your antiretroviral drugs less than 12 months	26	17%	8	15%	25	20%	7	2%	3	3%	3	1%
In the past 7 days, missed taking antiretroviral medicine 3 days or more	14	9%	4	8%	14	11%	6	2%	3	3%	1	0%
Virally suppressed[1,2]	30	20%	9	17%	27	22%	8	2%	4	4%	3	1%

[1]Virally suppressed is defined as an HIV-1 RNA ≤5000 copies/mL

[2]Viral suppression conditional on those currently taking antiretroviral (ART) drugs to treat an infection

Figure 6.8.1 HIV Treatment Cascade of Women Socializing at Sites

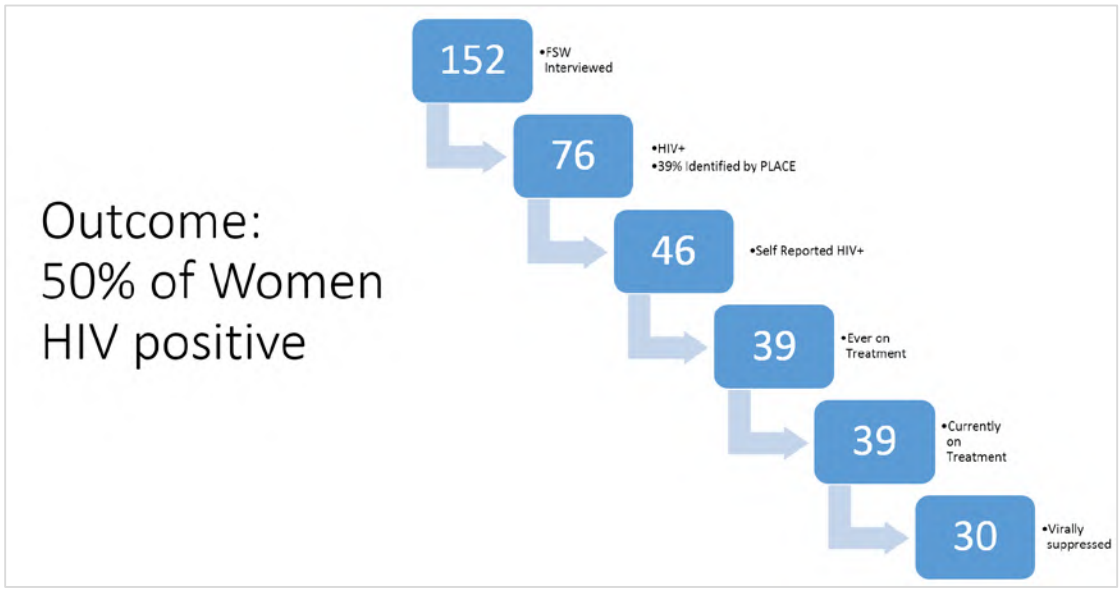


Figure 6.8.2 HIV Treatment Cascade of FSWs Socializing at Sites

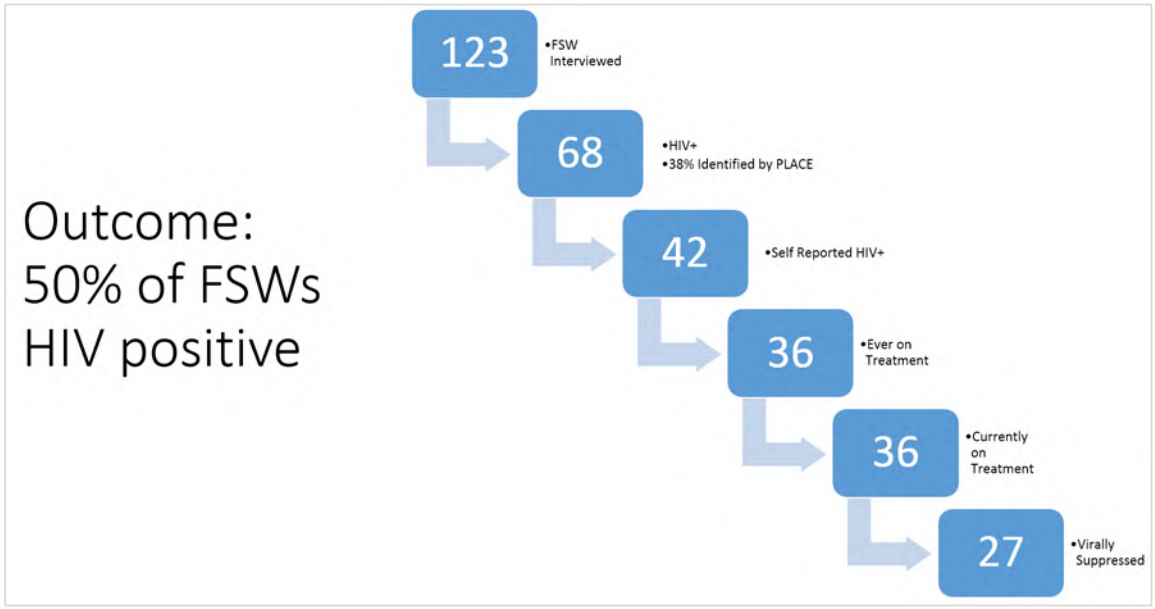


Figure 6.8.3 HIV Treatment Cascade of Men Socializing at Sites

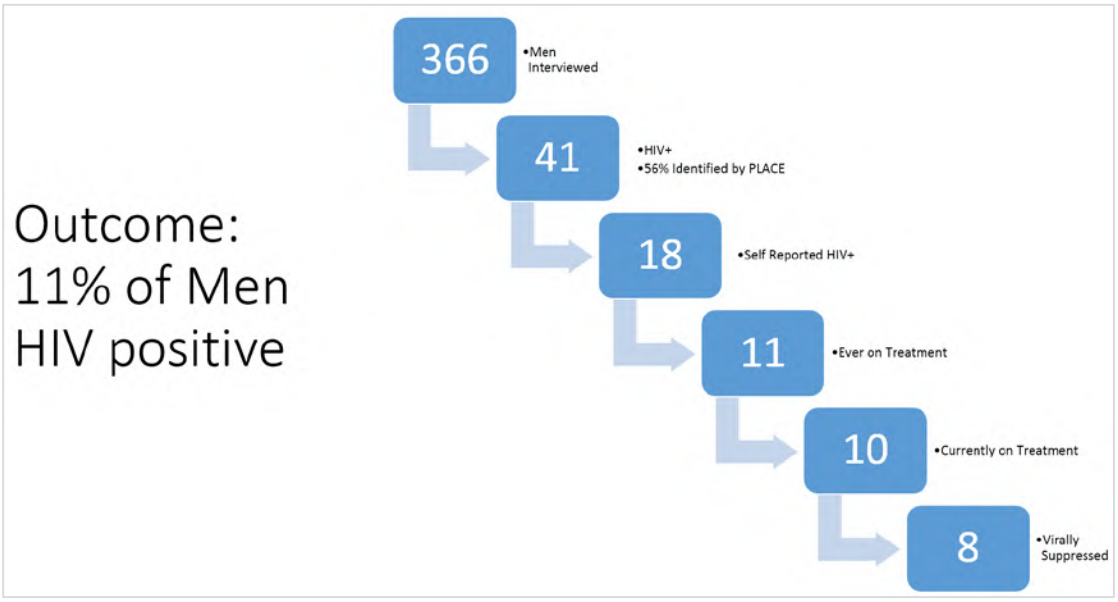
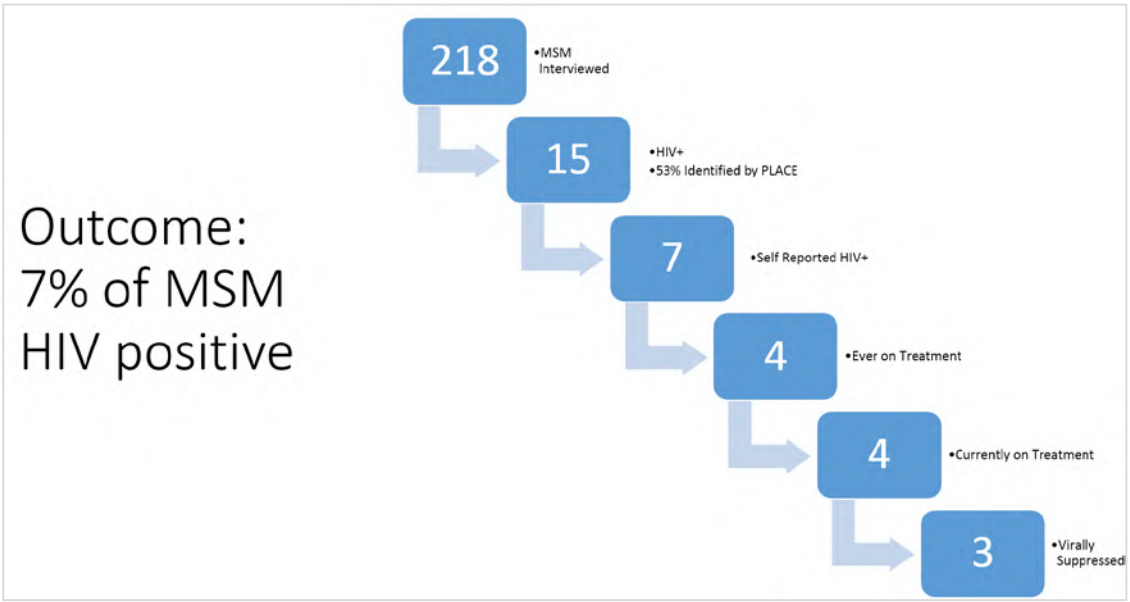


Figure 6.8.4 HIV Treatment Cascade of MSM Socializing at Sites



6.9 Biological Characteristics of People Socializing at Sites

Among all women, over one-third reported being examined or tested by a medical provider for a sexually transmitted infection other than HIV in the past 12 months. Thirteen percent reported having sores on or around vagina in the past 4 weeks. Less than 5% reported being diagnosed with tuberculosis in the past 12 months.

Among all men, approximately one-fourth reported being examined or tested by a medical provider for a sexually transmitted infection other than HIV in the past 12 months. Ten percent reported having sores on or around vagina in the past 4 weeks. Five percent reported being diagnosed with tuberculosis in the past 12 months.

Figure 6.9 Biological Characteristics of People Socializing at Sites

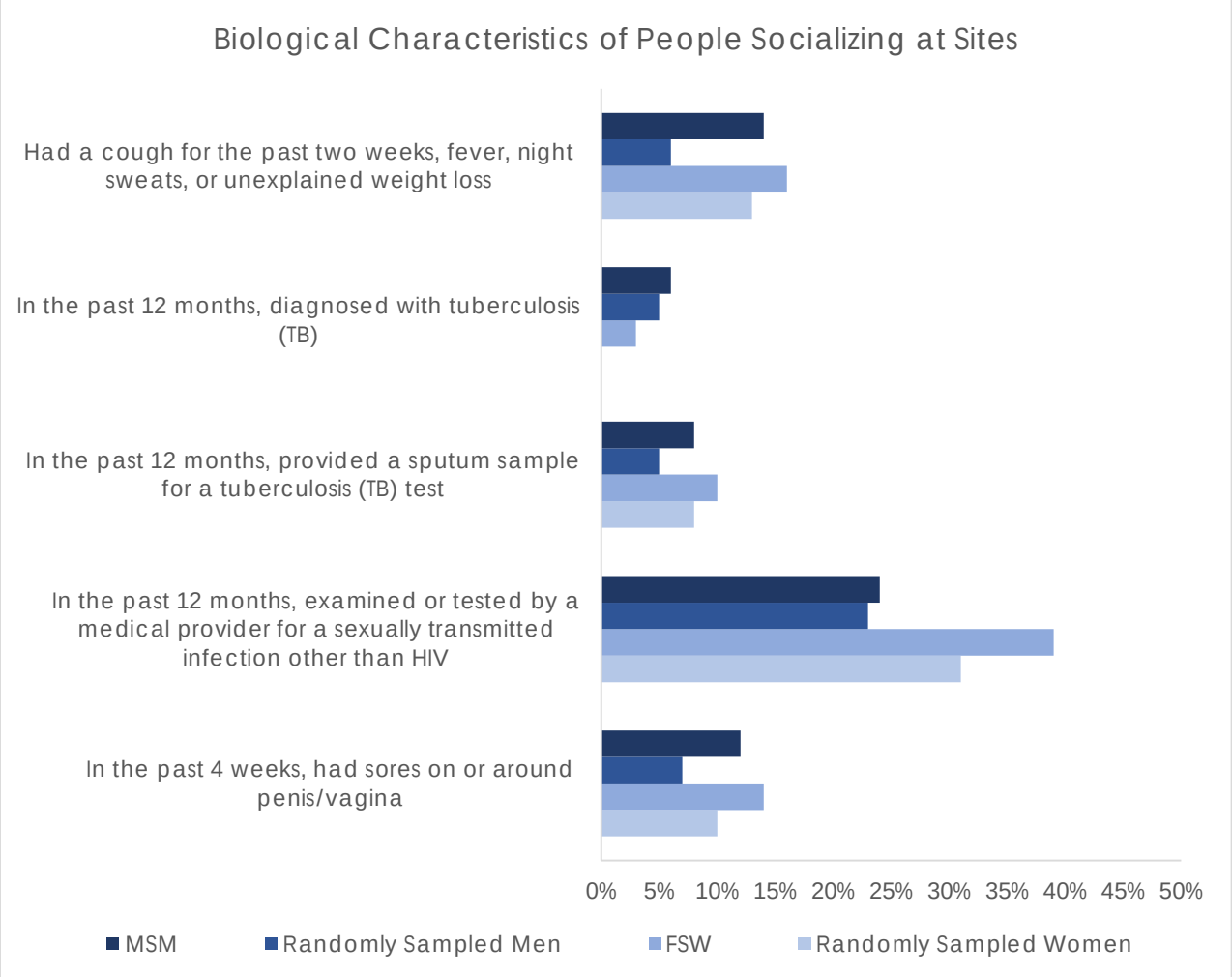


Table 6.9 Biological Characteristics

	WOMEN						MEN					
	All Women		**Randomly Sampled**		**FSWs**		**All Men**		**Randomly Sampled**		**MSM**	
Number of Respondents (N)	**152**		**52**		**123**		**366**		**101**		**218**	
In the past 4 weeks, had sores on or around penis/vagina	20	13%	5	10%	17	14%	35	10%	7	7%	27	12%
In the past 12 months, examined or tested by a medical provider for a sexually transmitted infection other than HIV	54	36%	16	31%	48	39%	87	24%	23	23%	52	24%
In the past 12 months, provided a sputum sample for a tuberculosis (TB) test	14	9%	4	8%	12	10%	25	7%	5	5%	17	8%
In the past 12 months, diagnosed with tuberculosis (TB)	4	3%	0	0%	4	3%	20	5%	5	5%	14	6%
Had a cough for the past two weeks, fever, night sweats, or unexplained weight loss	21	14%	7	13%	20	16%	49	13%	6	6%	31	14%

LINKAGES

Linkages Across the Continuum of HIV

Services for Key Populations

HOTSPOT VALIDATION EXERCISE REPORT

FY17 QUARTER TWO

February 28th, 2017

EXECUTIVE SUMMARY

Following a “site-walk” conducted in FY15 at the beginning of LINKAGES program in Malawi to identify FSW hotspots and estimate their population size; and following the release of PLACE study results in 2016 conducted with the same objectives, LINKAGES program conducted hotspot validation exercise in the quarter two of FY17 to establish active hotspots and up-to-date population size estimates. Three major steps were implemented during the validation exercise: (1) comparing PLACE study hotspot list to LINKAGES “site-walk” hotspot data as well as NAC FSW mapping results, then come up with a consolidated list for verification: (2) visit all the hotspots (including LINKAGES known sites) to establish whether the hotspots still exist and if they are active, and lastly; (3) estimate FSW population sizes in these hotspots. We used a standard LINKAGES hotspot validation tool for the actual verification process. The exercise took place between February 6th to 10th. From this exercise, the overall estimated FSW population size increased from 7,827 to 10,868 (39%) in the six districts. The number of active clustered hotspots moved from 279 to 377 (35%). The hotspots were further analyzed by typology as well as by DIC to determine DIC denominators. Such denominators are important as they enable DIC to plan activities based on their catchment area profile. It also enables the program to monitor and assess DIC performance. The exercise was important as it updates the hotspot list and population size estimates. It also enabled the project to extend coverage into peri-urban and rural areas. There is need to recruit new Peer Educator and Peer Navigators to cater for the newly identified hotspots. The next hotspot validation exercise is expected to take place in FY17 quarter four or FY18 quarter one.

INTRODUCTION AND RATIONALE

The Malawi National Strategic Plan 2015-2020 calls for a vibrant key population (KP) capacitated to effectively respond to the HIV epidemic. LINKAGES Project aims to build capacity of both female sex workers (FSWs) and Men who have sex with men (MSM) to fully access services just like any other population groups in the country. Starting from November 2015, while waiting for University of North Carolina (UNC) PLACE study, LINKAGES, in collaboration with the implementing organizations and district stakeholders conducted a 'site walk' to estimate sizes of FSWs. The outcome of this activity provided district estimates of FSWs by hotspots to inform HIV programming interventions.

In December 2016, National AIDS Commission (NAC) sanctioned a national FSWs mapping exercise including the 6 LINKAGES districts. LINKAGES provided technical assistance by using stepwise approach to build capacity of FSWs in all districts that seek to facilitate, establish and strengthen national coordination committees to ensure maximum representation of KP at high level meetings at both district and national level. FSWs district committee have been formed and established.

During this period, UNC conducted a PLACE study in all 6 LINKAGES impact districts and released study findings. The findings showed significant differences in the number of hotspots identified and FSWs estimated compared to the LINKAGES "site walk'' and NAC mapping activity. The PLACE study produced expressively more hotspots and higher KP size estimates. Consequently, LINKAGES conducted hotspots validation exercise with reference to 2015 ''site walk" data, 2016 NAC mapping data and the PLACE findings to establish number of functional hotspots as well estimating active FSW population in the hotspots. Further to this, it is a requirement for LINKAGES program to do hotspot validation exercise every six months due to different dynamics pertaining to the social life of KP such as sex work migrations, sprouting of new MSM networks and opening and closing of hotspots.

OBJECTIVES:

- To validate all hotspots identified by LINKAGES through the 2015 "site-walk" and NAC mapping exercise as required by the program; and update the FSW population size estimates.
- Validate all "hotspots" or "sites" identified through PLACE Study, come up with FSW population estimates, cluster the individual sites in the same vicinity into hotspots and incorporate them under LINKAGES program coverage.

METHODOLOGY

The hotspot validation process involved three major steps: (1) comparing PLACE study hotspot list to NAC mapping results and LINKAGES "site-walk" hotspot list, then identify additional sites from the UNC PLACE study: (2) visit all the hotspots (including LINKAGES known sites) to establish whether they exist and they are functional, and lastly; (3) estimate FSW population sizes in these hotspots.

We collected data using a standard LINKAGES Hotspot Validation Tool adapted from the *Monitoring Guide and Toolkit for Key Population HIV Prevention, Care and Treatment Programs* (see the Appendix). To conduct the validation in a shortest possible time, the LINKAGES country office team split into six teams, one team per district. The aim was to play supervisory role and provide technical assistance to the implementing partners in these six LINKAGES sites. The exercise run simultaneously in all six districts from February 6th to February 10th 2017 (one week). At district level, we formed Hotspot Validation teams comprising representation from the District Health Office, FSW leadership group and members of staff from LINKAGES implementing partners. We used a hotspot list obtained from PLACE report and "site-walk" data to conduct the validation. We removed duplicated sites from the PLACE pre-analysis data and harmonized it with "site-walk" data before distributing it to the district teams for the exercise. Due to the volume of the hotspots to be validated, the exercise run from morning, targeting bars and brothels, all the way into night when night clubs and other hotspots were operational. In all districts, the exercise started with an orientation meeting to the participants on the purpose and methodology. The following is how the district teams organized themselves for the exercise:

1. **Mzimba North:** We tasked 12 individuals to conduct the validation exercise in Mzuzu and surrounding areas under the supervisory leadership of a Senior Technical Advisor from LINKAGES country office. The team further split into three groups and sub-divided Mzimba North into three areas. Each group manned one of these areas and conducted the hotspot validation work.

2. **Mangochi:** In Mangochi the twelve-member team also sub-divided into three groups and with technical assistance from another Senior Technical Officer from LINKAGES country office. They conducted hotspot validation in both urban and rural areas. The groups went as far Makanjira and Namwera in Mangochi west and Cape Maclear in the northern part of the district.

3. **Lilongwe:** We put together a team of 16 individuals due to the size of the district. Lilongwe district is sub-divided into four operational zones under LINKAGES program. These are zones that also serve as catchment areas for the four drop-in centers in the district. The hotspot validation team also divided into four groups and conducted hotspot validation in each zone. The Senior Monitoring and Evaluation Advisor provided the overall technical support to the team.

4. **Blantyre:** A team of eight individuals was put in in place. They split into two groups and conducted hotspot validation in both urban and rural Blantyre. A relatively small team was partly because the implementing partner in the district, Pakachere, had already done 70 percent hotspot validation in the district. This team was just there finish off the remaining 30% coverage.

5. **Zomba:** A ten-member team formed three groups; the first one covering TA Mlumbe and TA Chikowi, the second group covered TA Kuntumanji, TA Mwambo and TA Nkumbila (which includes Chisi Island) and the last group covered TA Nkagula and TA and TA Malemia. LINKAGES Country Office was represented by two Senior Technical Officers.

6. **Machinga:** The team in Machinga divided into two groups and, like everywhere else, conducted the validation exercise in Machinga town, Liwonde and rural Machinga. LINKAGES Country Office provided technical assistance through the SBCC Advisor. The team validated almost all deduplicated sites on the PLACE list except for Mwitiya trading center due to bad access roads.

In brief, we collected hotspot names, captured hotspot type, location, maximum and minimum FSW attendance levels, peak FSW hours and peak day in the week, and we also established whether a hotspot was active or inactive. On estimated FSW population per hotspot, we settled for the mean value of minimum and maximum FSW attendance levels. The respondent for the questions could be a bartender, club bouncers, resident FSW or a bar owner. Data collected was entered on a computer spreadsheet (MS. Excel) by the teams in each district and then, together with a narrative report, sent to LINKAGES Country Office for project level consolidation. The monitoring and evaluation team handled the data cleaning and analysis part.

The following were major challenges encountered during the hotspot validation process:

1. Difficulties to extend the same methodology to validate hotspots and estimates population size of MSM due to absence of clear cut MSM hotspots and the discreet nature MSM social life in the country. We received recommendations to use alternative methodologies.

2. The PLACE hotspot list had a lot of duplicates (about 61% on average) generally due to differences in spelling hotspot names by their data collection teams and one site having more than one recognizable name. Teams on ground spent a significant amount of time deduplicating the list before doing the actual validation.

3. The exercise was conducted during the rainy season in the country. The verification teams could not go out at times due to heavy rains. Furthermore, it was also difficult going off-road to the rural sites due to bad roads. In the end, this affected the validation schedule and, to some extent, the coverage rate of the exercise.

4. In Lilongwe, some bar owners were demanding IDs from the groups to admit them in their bars (they suspected them to be government official wanting to revoke their licenses or competitors surveying the market potential). Failure to do so led to being escorted off the premises.

RESULTS AND DISCUSSION

1. Harmonization Process and Validation Results for both PLACE and FY15 "Site-walk" Sites:

In the PLACE report, a site was defined as 'a physical venue, event, or website where people, include members of key populations, go to meet new sexual partners'. The pre-analysis PLACE data listed a total of 5,381 sites in six LINKAGES districts. During pre-verification desk review work, it was noted that PLACE pre-analysis data had a lot of duplicates mainly because of misspelling of site names and sometimes one site could have multiple recognizable names cited by informants. Through consultations with FSW and other stakeholders, validation teams on the ground reduced the 5,381 sites to 2,124 (61% duplicates removed). The deduplicated list was then harmonized with the 2015 "site-walk" sites and NAC mapping sites, ready for validation. From the harmonized list, a total of 1,586 individual sites were located and validated. This meant that remaining 538 sites from 2,124 could either not be traced or accessed. Of the validated 1,586 sites, 1,106 (70%) were established as sites actively patronized by FSW. The remaining 480 (30%) were regular lodges and hotels, traditional alcohol brewing homes, open grounds or public parks not typically patronized by FSW. For programmatic purposes, the active sites with FSW within same proximity were clustered into hotspots. A total of 377 hotspots were created across the six districts. The following table presents a summary of the deduplication and validation process per district:

	Sites from PLACE	PLACE Sites Deduplicated	Percent Duplication	Harmonized and Validated	Active FSW Sites	Hotspots (clustered sites[5])
Mangochi	678	222	67%	222	146	47
Blantyre	1,963	667	66%	501	308	133
Lilongwe	1,624	611	62%	336	287	69
Mzuzu	390	184	53%	115	113	69
Machinga	266	118	56%	118	93	23
Zomba	460	322	30%	294	159	36
Total	**5,381**	**2,124**	**61%**	**1,586**	**1,106**	**377**

[5] A hotspot consists of sites put together within ≈100m radius proximity.

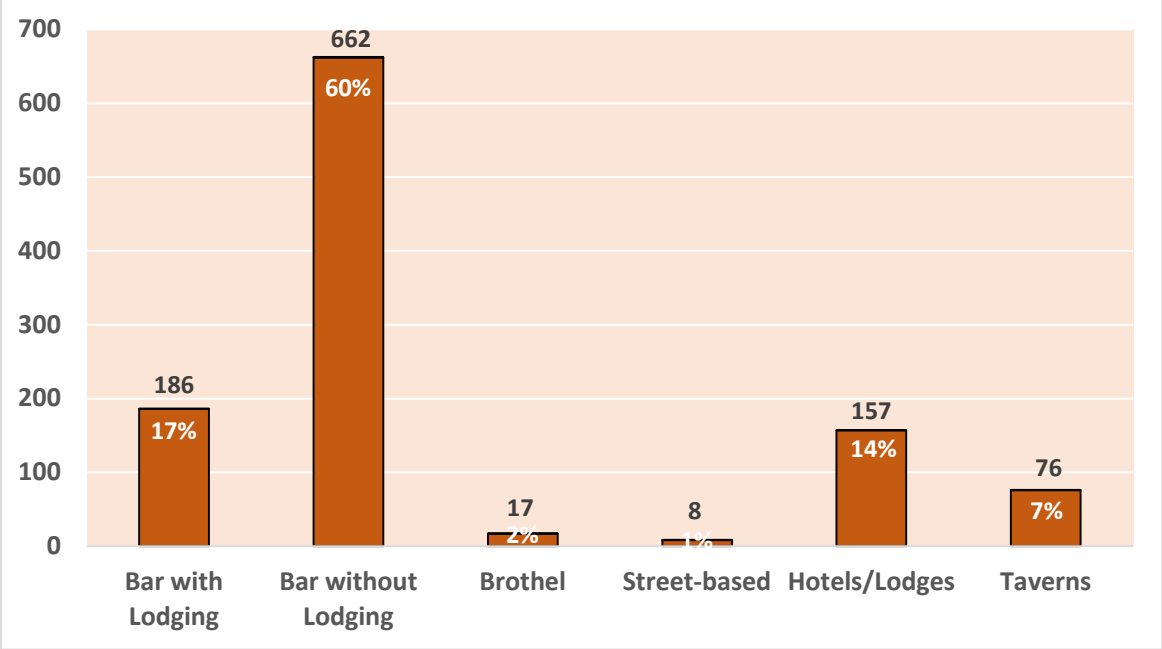
2. Changes between FY 2015 "Site-walk" and FY 2017 Quarter 2 Hotspot Validation:

The overall estimated FSW population size increased from 7,827 to 10,868 (39%) in the six districts. This was partly because the hotspot validation exercise, unlike the initial 2015 "site-walk", extended into peri-urban and rural areas of the districts. Social factors such as status of the economy and seasonal migration might have also contributed. The number of active clustered hotspots moved from 279 to 377 (35%). The following table summarizes changes in hotspots and FSW populations in each district:

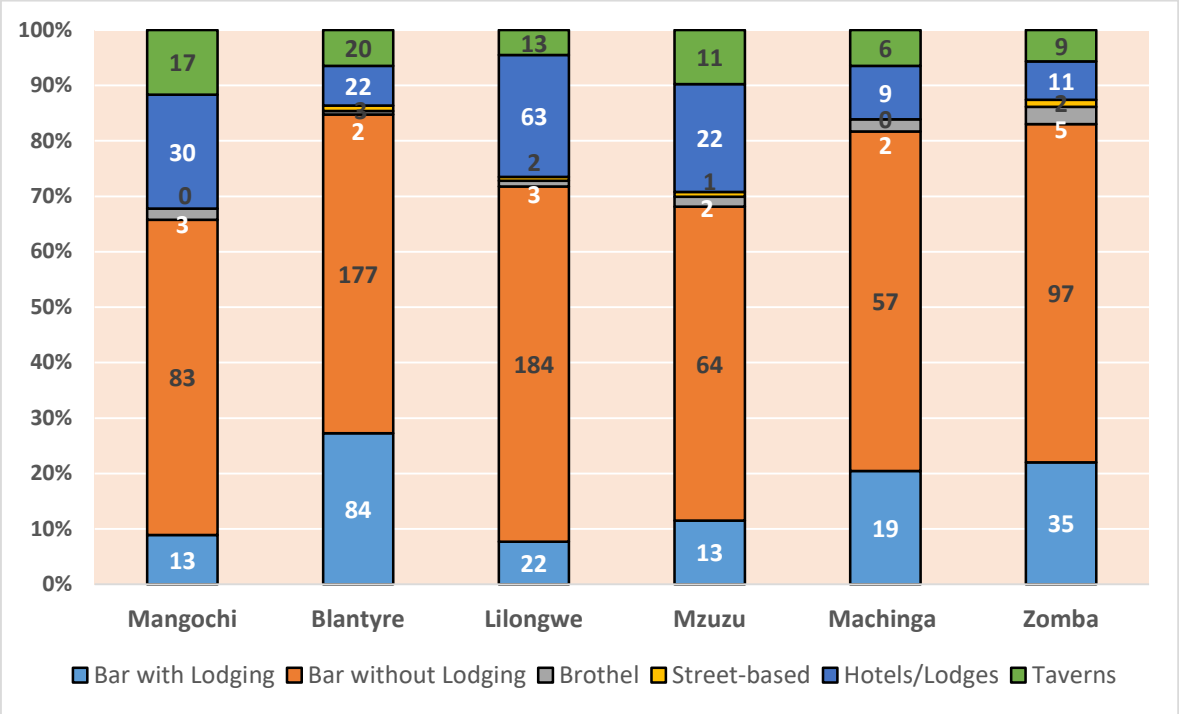
District	FY15 Clustered Hotspots	FY 17 Clustered Hotspots	Percent Hotspot Number Increase	FY15 FSW "Site Walk" Estimates	FY17 FSW Population Estimates	Percent Population Estimate Increase	LINKAGES Implementing Partner (FSW)
Mangochi	-	47	-	841	1,024	22%	Pakachere IHDC
Blantyre	87	133	53%	2,315	3,151	36%	Pakachere IHDC
Lilongwe	34	69	200%	2,625	3,261	24%	FPAM
Mzuzu	39	69	77%	852	1,527	79%	FPAM
Machinga	19	23	21%	430	867	201%	YONECO
Zomba	32	36	13%	764	1,038	36%	YONECO
Total	**279**	**377**	**35%**	**7,827**	**10,868**	**39%**	**-**

3. Distribution of Sites by Typology:

Of the 1,106 active FSW individual sites (which make up the listed 377 hotspots), 186 (17%) were bars with lodging, 662 (60%) sites were bars without lodging, 17 (2%) were brothels, 8 (1%) were street based, 157 (14%) were hotels and lodges and 76 (7%) were beer taverns. The following chart presents number of sites by typology:



From the chart above, most sites are bars without lodging facility followed by bars with lodging facility. Brothels and street-based are the least common site typologies. The following bar chart presents district level proportions of number of sites by typology:



4. Hotspot Number and FSW Population Size Estimate per DIC:

The hotspot validation exercise enabled the team to allocate hotspots to Drop-in Centers (DIC). All 377 hotspots were allocated to DICs based on nearest distance. This was very important as it made possible for the DIC to plan activities based on concrete catchment area profile data. DIC can now know how much to expect in term of 'reach' (KP_PREV), what hotspots to target for outreach clinics and what target to give the Peer Educators. At the other end, the project will be able to measure the performance of each DIC based on the catchment population size estimates of FSW. Form the routine monitoring data it will be easier now to tell which DICs need more support in terms of drugs and commodities allocation, technical assistance and human resource. The following table presents number of hotspots and estimated population size per DIC:

District	DIC	Number of Hotspots	FSW Population Size
Mangochi	Mangochi	35	536
	Monkeybay	12	488
Blantyre	Bangwe	15	402
	Chirimba	47	1,384
	Naperi	71	1,365
Lilongwe	Area 23	13	583
	Area 25	25	1,335
	Area 36	18	762
	Chigwirizano	13	581
Mzuzu	Chasefu	22	490
	Chibanja	47	1,037
Machinga	Liwonde	23	867
Zomba	Mapale	36	1,038
Total	-	**377**	**10,868**

NEXT STEPS

LINKAGES program now has updated data on active FSW hotspots as well as the estimated FSW population size in all six impact districts. This will enable the program to do effective planning and monitoring of HIV services for FSW. The following major steps are expected to take place:

-
- Recruitment of additional Peer Educators as well as Peer Navigators for the newly identified hotspots. The implementing partners must determine how many Peer Educators and Peer Navigators will be needed. This will help to develop and cost annual workplans.
- Quantification of commodities such as medical drugs, condoms and lubricants that will be needed given the expanded coverage. The results from this exercise enables the program to know how much commodities are needed and where to allocate them based on client volume size. High volume DICs must be prioritized.
- Setting targets for FY18 in relation to the updated hotspot validation data. This will ensure realistic and achievable targets. At Implementing partner level, target setting should go all the way down to DIC level where majority of services are organized and provided. DIC performance must be measured against those targets.
- DICs to update their profiles based on the coverage data presented in this report. This means that DICs will now be able to know how many hotspots are in their catchment area, how many FSW are they expected to be reached with SBCC messages. Clinical activities such outreach services must be planned based on population volumes and monitoring data gaps.
- Hotspot validation is an important exercise. LINKAGES team expects to have another validation exercise in quarter four of this FY or first quarter of FY18.

PROPOSED DISTRIBUTION LIST OF THE REPORT

- LINKAGES Activity Manager - USAID Malawi.
- LINKAGES Country Office team (FHI 360)
- LINKAGES HQ team
- LINKAGES Implementing Organization:
    - Pakachere IHDC.
    - FPAM.
    - YONECO.
    - CEDEP.

APPENDIX TOOL #1 : HOTSPOT VALIDATION FORM

GENERAL INFORMATION			
Implementing Partner:		Name of Peer Educator : _____	
Name of hotspot		Hotspot Type*	
Hotspot code	☐☐☐	Location	
Department		Commune	
Type of KP	1=FSW, 2=MSM, 3=TG, 4=PWID	Respondent	1=KP, 2=Others, 3=None
Nature of hotspot	1=Active, 2=Inactive		
Date of visit 1 (DD/MM/YY): ___/___/____		Date of visit 2 (DD/MM/YY): ____/_____/_____	

	SPOT PROFILE	
1	On a usual/typical day, how many KPs work at/visit this hotspot?	LOW ☐☐☐ HIGH ☐☐☐
2	At this hotspot, what time of the day do we find the maximum number of KPs (peak time)? CIRCLE AS APPLICABLE	MORNING ..... A AFTERNOON ..... B EVENING ..... C NIGHT ..... D ALL 24 hrs ..... E
3	At this spot, on which day/s of the week is the number of KPs greater than usual (peak day)? CIRCLE AS APPLICABLE	MONDAY..... A TUESDAY ..... B WEDNESDAY ..... C THURSDAY ..... D FRIDAY ..... E SATURDAY.....F SUNDAY .....G
4	On a peak day of the week/month, how many KPs work at/visit this hotspot (min – max)?	LOW ☐☐☐ HIGH ☐☐☐
	INFORMATION ON OTHER SPOTS	
5	Do you know any other place like this in this city/village/commune, where KPs work/visit? YES ☐ NO ☐	

	HOTSPOT NAME/ADDRESS	CONTACT
A		
B		
C		
D		

***Codes** for type of hotspot: **1**=Bar with lodging, **2**= Bar without lodging, 3=Sex den/Brothel, **4**=Strip club**, 5**=Streets/Highways, **6**=Home, **7**=Casino**, 8**=Beach, **9**=Guest house/Rest house/Hotels/Lodgings, **10**=Massage parlor**, 11**=Parks, 12=Beer tavern, 13=Public toilet, 14=Others_____(Specify)