

Comparison of Resource Allocation at HIV Facilities in Tanzania

Thuong Nong¹, MBA; Ryan McBain^{2,3}, PhD MPH;
Monica Jordan¹, MPH; Allyala Nandakumar¹, PhD

1 Brandeis University, Waltham, MA, USA

2 Brigham and Women's Hospital, Boston, MA, USA

3 Department of Medicine, Harvard Medical School, Boston, MA, USA

INTRODUCTION

HIV continues to persist as a major public health threat in many countries, despite substantial progress from global efforts to curb the epidemic over the past three decades. Approximately 38 million people are living with HIV worldwide;¹ two-thirds are living in Sub-Saharan Africa (SSA).² The U.S. Government, as the single largest foreign aid contributor, has invested over \$100 billion through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) to respond to the HIV/AIDS epidemic. PEPFAR is estimated to have saved 25 million lives and prevented millions of incident cases from occurring.³

Since 2004, PEPFAR has allocated a predominant portion of its budget to expanding HIV treatment, care, and prevention programs in SSA countries. Currently, 76% of PEPFAR funding is concentrated in 13 “priority high-burden countries”, of which 12 countries are in SSA.⁴ Although the role of PEPFAR is widely acknowledged, little is known about how PEPFAR contributions translate to different processes and outputs within health systems, including at the facility level in these countries. This report will examine this question by analyzing the difference in resource allocation at HIV facilities receiving PEPFAR support versus those not receiving this support.

Specifically, we analyzed resource allocation in Tanzania, which represents an important case study. Tanzania is one of PEPFAR’s priority high-burden countries—with 1.7 million people living with HIV (PLWH) and a national HIV prevalence of 4.8% among those ages 15-49 years.⁵ The country receives approximately US \$600 million per year from PEPFAR and the Global Fund to support HIV services, alongside its domestic HIV budget of US \$54 million. This joint effort has led to important milestones in meeting UNAIDS 90-90-90 targets.⁶ Tanzania has achieved a 69% reduction in HIV mortality between 2009 to 2019.⁷ In 2020 alone, it placed 170,000 new PLWH on antiretroviral therapy and identified more than 100,000 new PLWH by index testing.

We examined service delivery at both PEPFAR- and non-PEPFAR-supported facilities in Tanzania and measured the difference between the two types of facilities in resource consumption, service time, client wait time, and satisfaction. This report’s findings can be a reference for the Government of Tanzania (GoT) and other countries with similar HIV disease burdens, as well as implementing partners and donors who wish to understand how resources are currently allocated, and to improve facilities’ efficiency and service quality.

METHODS

Setting and Sample Characteristics

The Activity-Based Costing and Management initiative (ABC/M) is an initiative led by the Office of the U.S. Global AIDS Coordinator and USAID, with support from UNAIDS, The Global Fund, the CDC, and the U.S. Treasury to optimize the investment in HIV/AIDS care.⁸ ABC/M is being implemented in six African countries, including Tanzania. It captures facility,

administrative and out-of-pocket expenditures, which are used for the analysis of HIV service resource allocation and corresponding costs.

Using the time-driven activity-based costing, a core component of ABC/M, we collected data across six regions of Tanzania with the highest HIV prevalence (Dodoma, Kagera, Mbeya, Tabora, Mwanza, and Njombe), at 22 facilities: 5 dispensaries, 10 health centers, and 7 hospitals. Facilities were purposively selected to ensure representation on several characteristics, including: funding source (PEPFAR vs GoT), facility type (district hospital, health center, dispensary), sector (public vs private/NGO), and HIV client cohort volume (low [20-249 clients], medium [250-1,249 clients], high [1,250+ clients]) (see **Table 1**). At each facility, we gathered data from a comprehensive array of HIV services including ART, HIV testing and counseling (HTC), prevention of mother-to-child transmission (PMTCT), voluntary medical male circumcision (VMMC), and pre-exposure prophylaxis (PrEP). For the ART service line, we separately collected and examined data from clients with stable viral loads and those with unstable viral loads.

Eligible study participants were clients who were aged 18 or older, were living with HIV/AIDS, or were accessing one of the HIV treatment services listed at one of 22 facilities between September 2 and October 16, 2020. All eligible participants were informed of the study objectives and provided a consent form. The study was approved by the Institutional Review Boards of Tanzania’s National Institute for Medical Research and by the United States Health Media Lab.

Table 1. Characteristics of Participating in HIV Treatment Facilities

Facility Name	Region	Urbanicity	Public/Private	Funding Source	HIV Client Volume
Dispensaries					
Boko Dispensary	Dar es Salaam	Urban	Public	PEPFAR	Low
Mahaha Dispensary	Mwanza	Rural	Public	PEPFAR	Medium
Luhanga Dispensary	Mwanza	Urban	Public	PEPFAR	Low
Mwanzugi Dispensary	Tabora	Rural	Private/NGO	PEPFAR	Medium
Mwisole Dispensary	Tabora	Rural	Public	GOT	Low
Health Centers					
Bunazi Health Centre	Kagera	Rural	Public	PEPFAR	High
Chipanga Health Centre	Dodoma	Rural	Public	PEPFAR	Medium
Igawilo Health Centre	Mbeya	Rural	Public	PEPFAR	Medium
Inyala Health Centre	Mbeya	Rural	Public	PEPFAR	Medium
Kiwanja Health Centre	Mbeya	Urban	Public	PEPFAR	High
Lupembe Health Centre	Njombe	Rural	Public	PEPFAR	Medium
Magomeni Health Centre	Dar es Salaam	Urban	Public	PEPFAR	High
Makole Health Centre	Dodoma	Urban	Public	PEPFAR	High
Njombe Health Centre	Njombe	Urban	Public	PEPFAR	High

Upuge Health Centre	Tabora	Rural	Public	PEPFAR	Low
Hospitals					
Biharamulo District Hospital	Kagera	Rural	Public	PEPFAR	High
Ilembula Hospital	Njombe	Rural	Private/NGO	PEPFAR	High
Mbagala District Hospital	Dar es Salaam	Urban	Public	PEPFAR	High
Misungwi District Hospital	Mwanza	Rural	Public	PEPFAR	High
Mvumi Mission Hospital	Dodoma	Rural	Private/NGO	PEPFAR	Medium
Nzega District Hospital	Tabora	Rural	Public	PEPFAR	High
Tukuyu District Hospital	Mbeya	Rural	Public	PEPFAR	High

Note: Client volume is defined as low (20-249 clients), medium (250-1,249 clients), high (1,250+ clients)

Procedures

The process to collect data through time-driven activity-based costing (TDABC) included four steps:

First, the research team conducted key informant interviews with lead clinicians at participating facilities to understand and develop draft “process maps” of care delivery. Process maps captured an array of potential client experiences and provided data collectors with potential care pathways to examine. Lay health workers were trained and mobilized to serve as data collectors.

Second, data collectors made direct observations to record clients' duration (in minutes) at each activity when they moved through the facilities. Data collectors were provided with a stopwatch, and they also used an electronic tablet or a pen and paper to record observations.

Third, the research team collected information on both direct and indirect costs from facility ledgers, electronic financial systems, price lists, and staff self-reports. Salaries were reported by staff and were inclusive of fringe benefits. Equipment costs were estimated with annualized linear depreciation. Indirect costs included the salary of support staff and utilities.

Fourth, we calculated client-level costs for each HIV service line by multiplying capacity cost rates by the duration of time (in minutes) of a resource (personnel, equipment, or physical space) consumed by clients. Capacity cost rates were calculated by dividing the total cost of a resource by its availability for client consumption over a fixed time interval (in minutes). Based on the client-level costs, we also estimated the average costs of all processes utilized by the client during a facility visit.

Statistical Analysis

Our statistical analysis comprised two steps. First, we performed between-subjects t-tests to compare average service-level costs, service duration, client satisfaction, client waiting time, and client out-of-pocket expenditure between PEPFAR-supported facilities and one facility not supported by PEPFAR. Next, we conducted multivariable regression analyses to estimate the

magnitude of these differences after accounting for client and facility characteristics and visit type. Client characteristics included gender, marital status, education level, age category, and the existence of comorbid conditions. Facility-level characteristics included facility type, region, urbanicity, funder, and overall HIV client volume.

Based on the small number of observations included in our sample for the non-PEPFAR facility, we elected to use a two-sided alpha value of less than 0.10 ($p < 0.10$) as a determinative of statistical significance. All analyses were conducted in Stata 17.0.⁹

RESULTS

Pairwise Comparisons

Overall, the average total cost, with or without consumables, per client visit for each service line was higher in PEPFAR-supported sites than in the facility not supported by PEPFAR. However, only the statistically significant difference in total cost pertained to HIV testing and PMTCT, inclusive of consumables ($p < 0.10$). Without inclusion of consumables, the cost difference remained significant for PMTCT ($p = 0.02$).

For each cost category, PEPFAR-supported sites reflected higher costs for physical space, personnel, infrastructure, and consumable expenditures, though (again) these differences were generally not statistically significant. We only found statistically significant differences in terms of space, personnel, and consumables expenditures for PMTCT ($p < 0.10$), as well as consumables for HIV testing ($p < 0.10$). For indirect costs, PEPFAR-supported facilities had lower costs for each service line; however, these differences were not statistically significant ($p > 0.10$).

For each service line, we found that service duration was longer at PEPFAR-supported sites compared to the non-PEPFAR site; however, only the difference in service duration for PMTCT was statistically significant ($p < 0.05$). We also observed that the percent of total facility time spent waiting was, on average, longer at the non-PEPFAR site; however, the difference was only statistically significant for unstable ART clients ($p < 0.001$). See **Appendix Tables 1.1-1.8** for a full overview of these results.

Multivariable Regression Analyses

Table 2 presents results from multivariable regression analyses. With the inclusion of consumables, a typical visit cost \$0.09 less at PEPFAR-supported facilities compared to the non-PEPFAR facility, adjusting for a wide array of covariates—including visit type. This difference was not statistically significant ($p > 0.10$). Without the inclusion of consumables, a typical visit cost \$0.18 less at PEPFAR-supported facilities compared to the non-PEPFAR facility, adjusting for a wide array of covariates—including visit type. Again, this difference was not statistically significant ($p > 0.10$).

Client-provider interactions were 11.6 minutes longer at PEPFAR-supported facilities compared to the non-PEPFAR facility, adjusting for a wide array of covariates—including visit type. This difference was statistically significant ($p=0.003$) (**Table 2**). The personnel cost during a typical visit at PEPFAR-supported facilities was \$0.31 less compared to the personnel cost at the non-PEPFAR facility, adjusting for a wide array of covariates—including visit type. This difference was statistically significant ($p<0.01$). The space cost during a typical visit at PEPFAR-supported facilities was \$0.12 higher compared to the space cost at non-PEPFAR facilities, adjusting for a wide array of covariates—including visit type. This difference was also statistically significant ($p<0.001$). No other differences were statistically significant when comparing PEPFAR-supported facilities to the facility not receiving PEPFAR support ($p>0.10$). Similarly, there was no statistically significant difference in clients' percent of waiting time between facilities supported by PEPFAR and the non-PEPFAR site ($p>0.10$).

Table 2: Results of multivariable regressions on service costs

Client- & facility-level characteristics	Total cost, with consumables		Total cost, without consumables		Personnel cost		Space cost		Indirect cost		Consumables cost		Total time	
	Coef.	p	Coef.	p	Coef.	p	Coef.	p	Coef.	p	Coef.	p	Coef.	p
Gender														
Female	-0.22	0.76	-0.03	0.77	-0.08	0.35	0.003	0.77	0.04	0.10	-0.19	0.80	-0.43	0.73
Age group (years)														
18-30	0.03	0.98	-0.13	0.19	-0.08	0.16	-0.01	0.47	-0.04	0.25	0.15	0.88	-1.5	0.29
51-70	-1.61	0.10	-0.32	0	-0.21	0	-0.03	0.04	-0.08	0.02	-1.29	0.18	-4.54	0.02
71+	6.64	0.01	-0.4	0.03	-0.35	0.03	-0.02	0.49	-0.03	0.63	7.03	0.004	-7.95	0.000
Marital status														
Married	-0.31	0.70	0.02	0.86	-0.03	0.68	-0.01	0.22	0.06	0.11	-0.33	0.66	-1.1	0.32
Household Items	0.46	0.09	0.06	0.13	0.03	0.24	0.006	0.26	0.02	0.13	0.41	0.13	0.85	0.04
Comorbidities existence	-2.18	0.10	0.48	0.04	0.25	0.23	0.007	0.76	0.23	<0.001	-2.66	0.04	5.44	1.63
Education														
2=Primary, not completed	2.05	0.23	-0.05	0.75	0.01	0.87	-0.03	0.19	-0.03	0.58	2.09	0.20	-0.21	0.91
3=Primary, completed	0.67	0.36	-0.03	0.72	0.02	0.68	-0.01	0.41	-0.04	0.19	0.69	0.32	-0.61	0.62
4=Secondary, didn't complete	-0.03	0.98	0.06	0.72	0.11	0.34	-0.04	0.18	-0.01	0.8	-0.09	0.95	-0.14	0.95
5=Secondary, completed	-0.42	0.82	-0.24	0.21	-0.13	0.28	-0.004	0.85	-0.100	0.13	-0.19	0.92	-1.12	0.58
6=College, didn't complete	-1.86	0.76	0.24	0.43	0.23	0.3	-0.06	0.37	0.07	0.38	-2.09	0.72	3.12	0.54
7=College, completed	4.76	0.07	-0.13	0.6	-0.04	0.82	-0.02	0.45	-0.08	0.31	4.89	0.06	-3.46	0.28
Region														
Dodoma	-1.88	0.37	-0.15	0.49	-0.06	0.80	-0.05	0.15	-0.05	0.73	-1.73	0.41	-1.71	0.56
Mbeya	-2.05	0.37	0.05	0.89	-0.04	0.87	-0.04	0.48	0.12	0.46	-2.10	0.33	-4.73	0.24
Mwanza	0.77	0.68	0.92	0.05	0.5	0.07	-0.18	<0.001	0.60	0.01	-0.16	0.93	1.02	0.88

Client- & facility-level characteristics	Total cost, with consumables		Total cost, without consumables		Personnel cost		Space cost		Indirect cost		Consumables cost		Total time	
Njombe	-0.20	0.90	-0.07	0.76	-0.16	0.4	-0.04	0.22	0.13	0.23	-0.13	0.93	-7.73	0.10
Tabora	-0.32	0.89	0.54	0.14	0.27	0.25	-0.09	0.05	0.37	0.06	-0.86	0.69	-3.16	0.55
Facility type														
Health Centre	5.10	0.001	-0.06	0.86	0.27	0.10	-0.04	0.12	-0.29	0.20	5.16	0.001	1.20	0.66
Hospital	7.11	0.004	0.73	0.06	0.72	0.005	0.04	0.29	-0.03	0.91	6.38	0.01	1.78	0.70
Urbanicity														
Urban	4.28	0.06	0.66	0.07	0.37	0.08	-0.004	0.95	0.30	0.16	3.62	0.09	-6.95	0.21
PEPFAR support	-0.09	0.95	-0.18	0.56	-0.31	0.06	0.12	<0.001	0.001	1.00	0.10	0.94	11.63	0.00
HIV Volume														
Low	3.36	0.02	-0.18	0.53	-0.26	0.18	0.10	0.001	-0.02	0.88	3.54	0.01	5.18	0.27
Medium	4.83	0.03	0.39	0.29	0.10	0.67	0.003	0.94	0.29	0.20	4.45	0.04	-6.21	0.15
HIV intervention														
HIV Treatment (Stable)	19.08	<0.001	-0.18	0.61	-0.01	0.97	-0.02	0.71	-0.15	0.18	19.26	<0.001	-6.85	0.15
HIV Treatment (Unstable)	11.18	<0.001	-0.24	0.49	0.02	0.94	-0.01	0.89	-0.25	0.02	11.42	<0.001	-7.13	0.12
PMTCT	17.97	<0.001	-0.06	0.85	0.16	0.46	-0.02	0.73	-0.20	0.005	18.03	<0.001	-5.76	0.11
PrEP	2.30	0.20	0.29	0.42	0.32	0.21	-0.06	0.26	0.03	0.81	2.00	0.27	-7.53	0.05
VMMC	28.03	<0.001	4.74	0.001	3.52	<0.001	0.16	0.21	1.06	0.07	23.29	<0.001	50.99	<0.001

Note: HIV client cohort volume (low [20-249 clients], medium [250-1,249 clients], high [1,250+ clients])

For age categories, reference group is ages 31-50; for marital status, reference group is unmarried; for household assets, comparator is a one-unit difference in magnitude of household assets; for comorbidities, reference group is adults with no comorbid conditions; for education, reference group is no grade completed; for region, reference region is Kagera; for facility type, reference type dispensary; for HIV volume, reference group is High; and for intervention, reference intervention was HTC.

DISCUSSION

In this analysis, we compared resource allocation and costs for HIV services at 21 facilities supported by PEPFAR, compared to a facility not supported by PEPFAR. We found that the cost of care was comparable for most services—with the exception of a higher average expenditure for PMTCT at PEPFAR-supported facilities. However, these similarities masked important variations in resource allocation between the two facility types, including that for PEPFAR-supported facilities, more time was spent by providers with clients, allocated cost of human resources was lower, but the cost of physical space was higher. We discuss each of these findings in turn.

1. Patient time. On average, healthcare providers and staff spent 11.6 minutes more with clients at PEPFAR-supported facilities. Furthermore, client wait time was proportionally shorter at PEPFAR-supported facilities (although this finding was not statistically significant). The total provider interaction time that clients received at facilities was relatively short, with 11.6 minutes representing a meaningfully larger amount of time. It is possible that these differences are driven by specific types of interactions such as

health education sessions or consultation time with providers. Follow-up research could explore this line of inquiry, as it may provide greater insights on the relationship between greater time allocations and quality of care.

2. Human resource costs. Despite staff at PEPFAR-supported facilities spending more time with clients, the average cost associated with personnel was lower at PEPFAR-supported facilities. The most likely explanation for this is that PEPFAR-supported facilities have engaged in a greater degree of task shifting, whereby lower-level (and therefore less costly) health cadres spend proportionally more time interfacing with clients. Generally, task shifting is considered to represent an effective strategy for optimizing the allocation of limited human resources and allowing higher-level cadres such as physicians to function at the top of their license—so long as lower-level cadres have received sufficient training to be engaging in their circumscribed set of activities.^{10 11} An alternative explanation is that, through salary negotiations, the average salary for comparable health cadres is lower at PEPFAR-supported facilities compared to non-PEPFAR facilities; this, however, seems unlikely.
3. Physical infrastructure. On average, the allocated expenditure for physical infrastructure was modestly higher at PEPFAR-supported facilities. This may indicate that PEPFAR-supported facilities are newer, have a higher cost per square meter, or else have more comprehensive equipment, furniture and related supplies compared to the facility that is not supported by PEPFAR. Based on the size of PEPFAR subsidies, this difference may be expected. The extent to which such resource investments translate to improved patient health outcomes is beyond the purview of this study but represents an interesting line of future inquiry that has been pursued in other literature.¹²

Although our ability to make inferences was restricted by limited sample size, this analysis offers preliminary insights into key differences in resource allocation at PEPFAR-supported and non-supported facilities. Furthermore, it highlights a feature of cost analysis that is relatively unique to TDABC: namely, that even when HIV services are comparable, the constituent parts of TDABC allows for insights about the allocation of specific resources such as dedicated time by human resources. As a next step, we would suggest expanding data collection at facilities that are not currently supported by PEPFAR: this would allow more statistical power to make comparisons and provide further insights.

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Appendix

Table 1.1. Total Cost, with Consumables

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	3.72 (1.79)	3.70	233	2.86 (1.32)	2.69	13	0.09
ART, Stable Patients	22.87 (8.42)	18.49	272	18.72 (8.92)	18.13	10	0.13
ART, Unstable Patients	15.04 (10.10)	9.89	252	9.61 (0.70)	9.51	9	0.11
PMTCT	22.66 (20.45)	10.58	223	11.20 (9.37)	8.60	11	0.07
PrEP	6.77 (1.64)	6.09	16	na	na	na	na
VMMC	28.00 (9.01)	29.23	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.2. Total Cost, without Consumables

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	1.45 (1.18)	1.05	233	1.21 (0.84)	1.11	13	0.48
ART, Stable Patients	1.23 (1.26)	0.91	272	1.39 (1.12)	0.82	10	0.70
ART, Unstable Patients	1.31 (1.11)	1.03	252	1.01 (0.50)	0.94	9	0.42
PMTCT	1.76 (1.24)	1.37	223	0.85 (0.22)	0.89	11	0.02
PrEP	0.78 (1.04)	0.53	16	na	na	na	na na
VMMC	5.31 (2.52)	5.11	45	na	na	na	

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.3. Total Minutes

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	26.75 (18.88)	23	233	18.38 (10.48)	19	13	0.12
ART, Stable Patients	19.80 (16.26)	15	272	21.20 (17.86)	12.5	10	0.79
ART, Unstable Patients	21.55 (15.86)	16	252	15.44 (7.25)	14	9	0.25
PMTCT	24.70 (19.29)	18	223	13.45 (3.72)	14	11	0.06
PrEP	15.19 (16.28)	7	16	na	na	na	na
VMMC	79.16 (19.68)	83	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.4. Personnel Cost

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	0.83 (0.69)	0.64	233	0.60 (0.54)	0.45	13	0.24
ART, Stable Patients	0.75 (0.82)	0.56	272	0.71 (0.56)	0.46	10	0.90
ART, Unstable Patients	0.82 (0.76)	0.62	252	0.49 (0.26)	0.47	9	0.20
PMTCT	1.20 (0.91)	0.92	223	0.39 (0.10)	0.39	11	<0.01
PrEP	0.59 (0.72)	0.33	16	na	na	na	na
VMMC	3.97 (1.73)	4.15	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.5. Space Cost

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	0.12 (0.22)	0.07	233	0.06 (0.04)	0.06	13	0.34
ART, Stable Patients	0.11 (0.13)	0.07	272	0.07 (0.06)	0.04	10	0.44
ART, Unstable Patients	0.12 (0.14)	0.07	252	0.05 (0.03)	0.04	9	0.14
PMTCT	0.13 (0.14)	0.06	223	0.05 (0.02)	0.05	11	0.07
PrEP	0.04 (0.03)	0.03	16	na	na	na	na
VMMC	0.43 (0.22)	0.52	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.6. Indirects Cost

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	0.50 (0.52)	0.38	233	0.55 (0.31)	0.57	13	0.73
ART, Stable Patients	0.38 (0.46)	0.22	272	0.60 (0.51)	0.35	10	0.14
ART, Unstable Patients	0.36 (0.43)	0.22	252	0.46 (0.22)	0.42	9	0.48
PMTCT	0.44 (0.44)	0.28	223	0.40 (0.11)	0.42	11	0.79
PrEP	0.15 (0.34)	0.04	16	na	na	na	na
VMMC	0.91 (1.10)	0.41	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.7. Consumables Cost

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	2.27 (1.06)	2.69	233	1.65 (0.76)	1	13	0.04
ART, Stable Patients	21.64 (8.26)	17.47	272	17.33 (8.25)	17.47	10	0.11
ART, Unstable Patients	13.74 (9.85)	8.76	252	8.60 (0.47)	8.76	9	0.12
PMTCT	20.90 (20.10)	8.72	223	10.35 (9.35)	7.82	11	0.09
PrEP	5.99 (0.79)	5.42	16	na	na	na	na
VMMC	22.70 (7.30)	22.46	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.

Table 1.8. Percent Patient Time Spent Waiting

Intervention	PEPFAR			Non-PEPFAR			Sig.
	Mean (SD)	Median	N	Mean (SD)	Median	N	
Testing	67.16 (23.75)	72.88	212	72.02 (20.48)	79.93	12	0.49
ART, Stable Patients	55.69 (30.35)	57.69	255	63.78 (30.35)	70.67	6	0.43
ART, Unstable Patients	53.30 (24.34)	54.30	238	89.40 (6.53)	92.85	7	<0.001
PMTCT	62.56 (25.27)	71.00	204	79.07 (15.34)	82.50	6	0.10
PrEP	73.71 (14.22)	77.08	12	na	na	na	na
VMMC	79.69 (14.16)	85.06	45	na	na	na	na

Note: Significance reported as p-value from t-sample t test with equivalent variances.