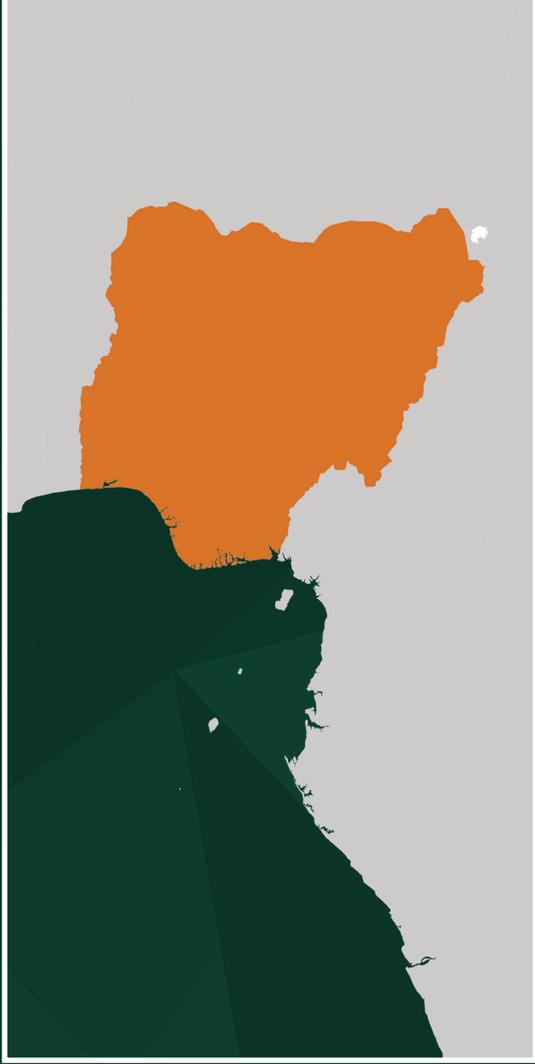


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ASSESSMENT OF DIRECT FEES AND INDIRECT COSTS FOR PEOPLE SEEKING HIV SERVICES IN NIGERIA



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Abbreviations

ART	antiretroviral therapy
ARV	antiretroviral
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HP+	Health Policy Plus
NACA	National Agency for the Control of AIDS
NGN	Nigerian naira
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
US\$	U.S. dollar
USAID	U.S. Agency for International Development

Background and Study Rationale

In March 2019, Nigeria reported an adult HIV prevalence rate of 1.4 percent, making it one of the five countries in the world with the highest numbers of people living with HIV (NACA, 2019). In Nigeria, various development partners—such as the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund)—as well as the government of Nigeria are financing national-level above-site efforts to combat the epidemic. These partners are also providing support to designated health facilities to ensure that antiretroviral (ARV) drugs, CD4 count tests, viral load tests, and other necessary diagnostic tests related to HIV care are available free of charge to patients. In addition, rapid test kits for people who want to know their HIV status are also provided free of charge to public facilities and communities. Though these commodities are generally free to patients, HIV patients or individuals who want to know their HIV status may be subject to various types of charges and fees at health facilities. Facing such fees, patients who are more vulnerable socioeconomically may adapt their health-seeking behavior—possibly becoming less adherent to the routine intake of ARVs, scheduling fewer visits to facilities, or demonstrating other adverse behaviors. These behaviors can negatively affect patients’ health outcomes and impact public health as a whole.

In recent years, there has been mounting evidence that public facilities are charging careseekers different types of user fees for HIV services (see Box 1). For example, Onwujekwe et al. (2016) measured out-of-pocket spending of outpatient visits for HIV care and found that patients spend an average of US\$2.11 on medical expenses and user fees, \$3.05 on transportation, and \$0.90 on purchasing food. Ndukwe et al. (2018) also measured out-of-pocket spending for HIV services, finding that people living with HIV would spend an average of \$528 per year. Etiaba et al. (2016) estimated that people living with HIV in Nigeria spend on average \$0.90 on medical expenses, \$3.90 on transportation, and \$0.60 on food purchases for outpatient visits. Now, it is important to revisit the situation of user fees for HIV care in the context of Nigeria’s current need to achieve epidemic control, the changing policy dimensions of the HIV response with recent epidemiological data, and a rapidly changing health financing context at state and federal levels. Out-of-pocket expenses due to use of services, combined with indirect costs linked to facility visits such as transportation and opportunity costs, present a serious burden to people living with HIV, especially in Nigeria. People living with HIV have the same levels of socioeconomic vulnerability—if not greater—as has the general population; in Nigeria, it has been estimated

Box 1. Types of User Fees and Costs

Direct fees are fees that the patient incurs when accessing a health service. Examples of such fees include hospital registration, commodity, and consultation fees. Depending on the type of facility, charging some types of fees is illegal (also sometimes referred as “informal”).

Indirect costs are costs faced by a patient that are not directly related to receiving care. Two types of indirect costs are included in this study:

- *Transportation costs* – costs that the patients incur to transport themselves to and from the health facility.
- *Opportunity costs* – the value of income-generating opportunities lost by seeking and accessing services. In the context of this study, these costs may include time spent traveling to and from the facility plus time spent at the facility. Time invested is estimated in monetary value using the average hourly income, assuming that the patient could have otherwise been earning income during this time.

that 50 percent of the population lives in poverty (World Bank, 2019). In this context, understanding the prevalence and magnitude of user fees and indirect costs can help to design appropriate health financing and/or provider regulation policies that can minimize deleterious effects on the careseeking behavior of people living with HIV and people at risk of HIV, and remove barriers to reaching epidemic control.

To address the perennial challenge of out-of-pocket expenditure hindering access and adherence to care for people living with HIV in Nigeria, an Expanded Theme Group was set up by the director-general of the National Agency for the Control of AIDS (NACA) in February 2019. It brought together prominent stakeholders, including development partners such as U.N. agencies, the World Bank, PEPFAR, the Global Fund, and civil society. The aim of this group was to make recommendations on how to reduce and/or eliminate user fees in HIV service delivery. Through this meeting, as well as additional directives from PEPFAR, the U.S. Agency for International Development (USAID) in Nigeria engaged the Health Policy Plus (HP+) project, an initiative funded by USAID and PEPFAR, to assess the prevalence, magnitude, and types of direct fees and indirect costs incurred by people living with HIV in select states in Nigeria. The end use of the findings is to inform PEPFAR and USAID priorities.¹

This report summarizes the key findings from the study and proposes initial policy recommendations to stakeholders on how to enhance financial protection for people living with HIV and people at risk of acquiring HIV through elimination and/or reduction of user fees and indirect costs. A follow-up brief (Dauda et al., 2019) from HP+ provides a more detailed discussion on policy recommendations for reduction or elimination of user fees and illegal charges for HIV services in Nigeria.

¹ Elimination of “all formal and informal user fees in the public sector for access to all direct HIV services and related services” was named as a “Minimum Requirement” for Nigeria under its *Country Operating Plan 2019* guidance issued by the Office of the Global AIDS Coordinator (PEPFAR, 2019).

Methods

A descriptive cross-sectional survey at the facility level was undertaken in May 2019 to estimate the prevalence and magnitude of user fees and indirect costs faced by people living with HIV when seeking HIV care in four Nigerian states. Two of the four states chosen have a high HIV burden but all four—Akwa Ibom, Kano, Lagos, and Rivers—are actively supported by the Nigerian government and development partners. In these states, HP+ randomly selected 31 PEPFAR-supported healthcare facilities that were providing HIV care and treatment services with a minimum patient volume of 20 patients per day.

HP+ collected data from patients and persons seeking HIV services. However, a critical difference with the studies previously cited is that the HP+ survey occurred at facilities, whereas the Onwujekwe study interviewed patients at home or at a location of their choice. In addition, HP+ added the element of interviewing providers as well as patients. Analyzing discrepancies between providers' and patients' responses could have policy utility.

Sample: In each of the selected facilities, HP+ interviewed between 15 and 20 people living with HIV and/or people seeking HIV testing, asking questions related to expenses incurred during their current or last facility visit for HIV care, transportation costs, travel time, and time spent at the facility. A total sample of 645 patients were interviewed. In addition, in nearly all the facilities, two healthcare providers were also interviewed (Table 1).

Table 1. Number of Facilities and Respondents Surveyed per State

Description	Akwa Ibom	Kano	Lagos	Rivers	Total
Number of facilities visited	7	4	16	4	31
Number of providers interviewed	15	8	30	8	61
Number of patients interviewed	146	80	314	105	645

Data collection process: Patients were approached for exit or entry interviews at the point of care, e.g., the HIV clinic or the outpatient clinic, and were interviewed either before or after they had received services. For those interviewed prior to receiving services, information on their last facility visit was collected. This was a deliberate choice to avoid the preponderance of either recall bias (prior services are less likely to be remembered for information on fees; patients are more likely to only recall the most recent service event) or provider-influenced bias (due to the fact of enumerators/observers at the facility, the services and fees offered on the day could differ from usual practice). Data were collected by trained enumerators using computer-assisted personal interviewing software.

Ethical clearance: Institutional review board ethical approvals were obtained from both the Nigeria-based National Health Research Ethics Committee and the U.S.-based Health Media Labs Institutional Review Board prior to the start of data collection. Informed consent from all respondents was obtained, and the interviews were conducted in private. All respondents were 18 years or older. If respondents were visiting the facility to collect medicines on behalf of someone else (usually a minor), then information was collected for the intended recipient of the service.

Instrument design: The survey design for both providers and patients was informed by a policy note issued by the Expanded Theme Group outlining the various types of costs faced by HIV service recipients that are of policy interest. Providers were asked about the types of

user fees that the facility usually charges, by type of cost and HIV-related service. Patients were asked about their experience reaching the facility and wait time for care, their socioeconomic and demographic characteristics, the reason for their visit, and the costs incurred in terms of user fees by type of cost and service that day or during a previous visit (when interviewed before services were received). To minimize additional burden on patients, the survey questionnaire was kept concise, with an estimated 30-minute completion time.

Creating wealth categories: Respondents were also asked about their households' ownership of different assets (e.g., refrigerator, mattress, television), similar to questions included in Demographic and Health Surveys. Responses were used to create a wealth index using statistical principal component analysis. The index was used to divide the sample of respondents into quintiles. Respondents belonging to the bottom two wealth quintiles were categorized as "poor." The respondents' hourly income was estimated using the previous month's reported income. For the analysis on indirect costs, those who reported no income were assigned an income after matching them with other respondents who had similar asset ownership profiles.

Key limitations: The study was conceived, designed, and put into the field rapidly to meet the USAID and PEPFAR deadline of June 2019. As a result, it has four limitations that are partially derived from the timeline. First, because respondents were recruited through patient interviews at the facility, the study captured only people living with HIV who were able and willing to seek care on the day of visit. This may underestimate the financial burden as it misses any patients so burdened by out-of-pocket costs that they are unable to visit the facility. While this issue may be somewhat mitigated by interviewing patients at home, identifying patients and their home locations posed data as well as ethical challenges that could not be easily reconciled in the time available. Second, the study was conducted only at PEPFAR-supported facilities due to the ability to contact supported facilities and recruit them for the study. Prevalence, magnitude, and types of costs may be considerably different at Nigerian facilities that do not receive external or specific HIV funding. Third, no tertiary facilities were included in the sample in order to avoid potential delays—and there is anecdotal evidence that user fees are more prevalent and higher in tertiary facilities. Fourth, the four states chosen for data collection covered only three out of Nigeria's six geopolitical zones (though two of the other zones have low HIV prevalence).

Results

Key characteristics of the respondents, including gender, age, educational attainment, sources of income, marital status, and HIV care history, were collected (Table 2). Clients of HIV services in our sample had an average age of 39; three-quarters were female. One-third of patients had a primary education or less; however, compared to the 2018 Demographic and Health Survey, the sample was better educated. One-quarter of the respondents reported no source of income. Most clients at the facility reported they were picking up medicine or making a visit related to antiretroviral therapy (ART). In addition, most patients seeking ART medication were not on a differentiated service delivery schedule, e.g., multi-month scripting—90 percent of clients reported visiting facilities every month or every two months. On average, patients had been on ART for 3.9 years.

Table 2. Descriptive Statistics of Respondents

Category	Characteristics	Total (N: 645)
Age and sex	Average age (respondent)	39
	Female (respondent)	75%
Highest level of education achieved	No education	9%
	Arabic/Qur'anic education	4%
	Some/complete primary	19%
	Some/complete secondary	48%
	Post-secondary	20%
Sources of income	No income	25%
	Sales of items	34%
	Salary/wages	16%
	Artisan/services	24%
	Rent/other	1%
	Average monthly income (Nigerian naira)	26,815
Services sought at the facility	Pick up ARV medication	92.7%
	Regular visit for HIV treatment	30.1%
	Pick up ARV prescription	26.0%
	HIV counseling	19.8%
	Request a test for HIV	7.1%
	Other	7.4%
Frequency of patients visits to facility for ART	Every 2 weeks	2%
	Every month	33%
	Every 2 months	57%
	Every 3 months	8%
Average length on ARV treatment	Number of years	3.9

What is the prevalence and magnitude of direct fees faced by people living with HIV in Nigeria?

One-quarter (25 percent) of patients reported paying at least one direct user fee for HIV care services during the last visit to a healthcare facility (Table 3). Prevalence of direct fees was higher among poor patients, at 27 percent. Overall, prevalence was highest in Rivers (55 percent) and lowest in Kano (6 percent).

Table 3. Direct Fees, and Indirect and Opportunity Costs (NGN)

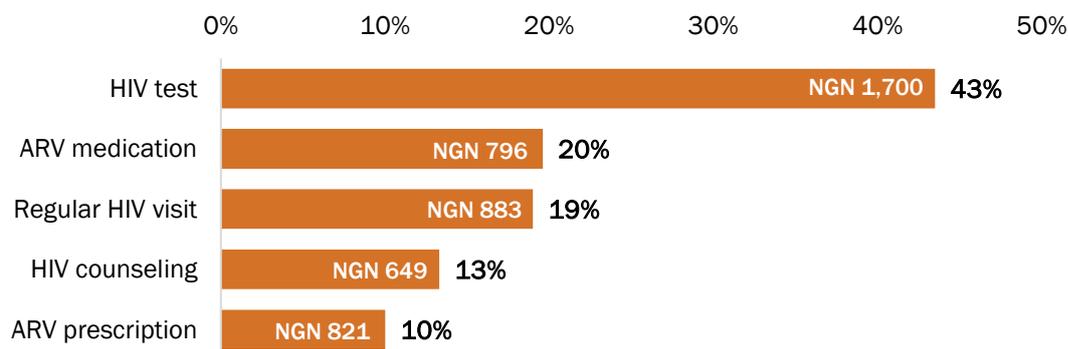
Category	Indicator	Akwa Ibom	Kano	Lagos	Rivers	Poor sub-sample	Total
Direct fees	Average prevalence	32%	6%	17%	55%	27%	25%
	User fee – Mean	941	1,600	1,809	857	1,270	1,235
	User fee – Median	400	950	700	700	600	600
	Mean as percent of daily income	85%	206%	111%	71%	170%	92%
Time investment (hours)	Travel to and from facility	1.3	1.2	1.9	1.3	1.5	1.5
	Time spent at the facility	2.0	2.1	2.5	2.4	2.3	2.3
	Total time spent	3.3	3.3	4.4	3.6	3.9	3.9
Indirect costs	Total indirect costs	1,133	503	1,446	1,030	844	1,191
	Transportation costs	734	282	664	578	525	619
	Value of time spent	399	220	782	452	319	573
	As percent of daily income	103%	65%	88%	85%	113%	89%
Total burden: user fee plus indirect costs	Direct fees plus indirect costs, if incurring both fees	2,096	3,683	3,559	1,818	2,104	2,508
	Percent of daily income	190%	474%	218%	150%	281%	187%

The total amount spent on direct fees varied significantly across states, with a few patients reporting total fees incurred as high as 14,700 Nigerian naira (NGN; US\$40.50). The average amount spent on direct fees among patients who reported incurring a fee was NGN 1,235 (US\$3.40), with a median of NGN 600 (US\$1.70). The financial burden as a proportion of the average daily income represented by these direct fees is quite significant. The average amount spent per patient on direct fees is equivalent to 92 percent of the average daily income. Among the poor, the average fees were equivalent to 170 percent of daily income.

For which HIV services did patients incur direct fees and which type of fees did they incur?

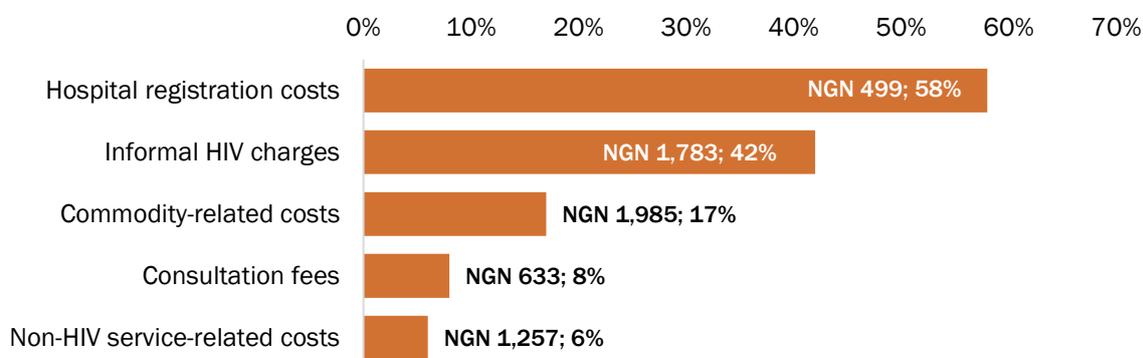
Direct fees were more prevalent among three services: HIV testing, ARV medication, and regular visits for HIV treatment, where 43 percent, 20 percent, and 19 percent of patients seeking those services, respectively, paid (responses overlap and do not sum to 100 percent). See Figure 1 for prevalence by type of service and the average direct user fee paid across the entire sample.

Figure 1. Type of HIV Service, Average Amount of Direct Fees Paid, and Prevalence in Sample



Patients reporting payment for a specific HIV service were asked what the direct fee was said to cover. “Hospital registration” was the most common type of fee charged, with more than half the patients reporting paying such a charge. This is true for both the full sample and the poor sub-sample. Hospital registration fees are sometimes paid by patients to enter the HIV ward, or for the nurse to place a patient’s files in the respective queue. It must be noted that it is highly likely that these “hospital registration costs” were not related to first-visit one-time expenditures. Other common charges reported were commodity-related costs, including HIV tests, and illegal/informal HIV charges. These informal charges include fees for ARV prescriptions or medications, CD4 count tests, and viral load tests. On average, the poor pay considerably less frequently for commodity-related costs and for non-HIV service-related costs than the rest of patients in the sample.

Figure 2. Type of Direct Fees, Amount, and Prevalence among Those Who Incurred Fees



What economic burden do indirect costs for accessing services represent for people living with HIV?

Overall, patients in the sample spent an average of NGN 619 (US\$1.70) and poor patients spent an average of NGN 525 (US\$1.45) on transportation costs. The average overall time invested to receive care was 3.9 hours, with a greater amount of time spent in Lagos (4.4 hours). Total indirect costs per patient were equivalent to 89 percent of the average daily income across the sample, and 113 percent for the poor (Table 3).

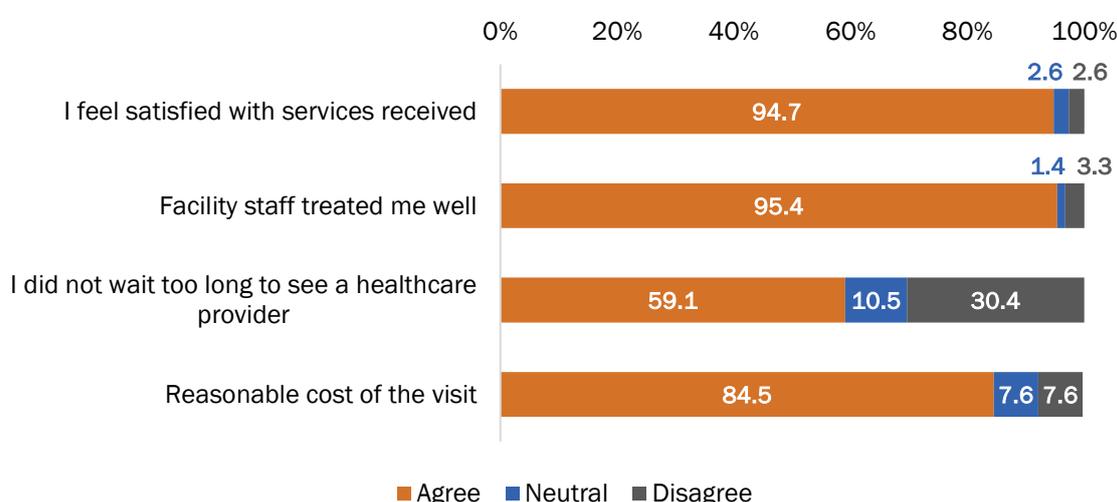
What is the combined economic burden from direct fees and indirect costs?

For patients and clients who incurred both direct and indirect costs, the overall burden was NGN 2,508 (US\$6.90), equivalent to 187 percent of estimated average daily income, or almost two full days of income. The burden is considerably higher for poor patients, who incurred an average of NGN 2,104 (US\$5.80) in costs, which is equivalent to 281 percent of their daily income—nearly three days’ worth.

What is the level of satisfaction with care received?

Most patients reported high levels of satisfaction overall for HIV services received, cost, and provider behavior. However, wait times received a low score, with only 60 percent of respondents stating that they did not wait too long to see a provider (Figure 3). More than 30 percent of patients in the sample felt that the wait was too long.

Figure 3. Patient Satisfaction with Service Provision

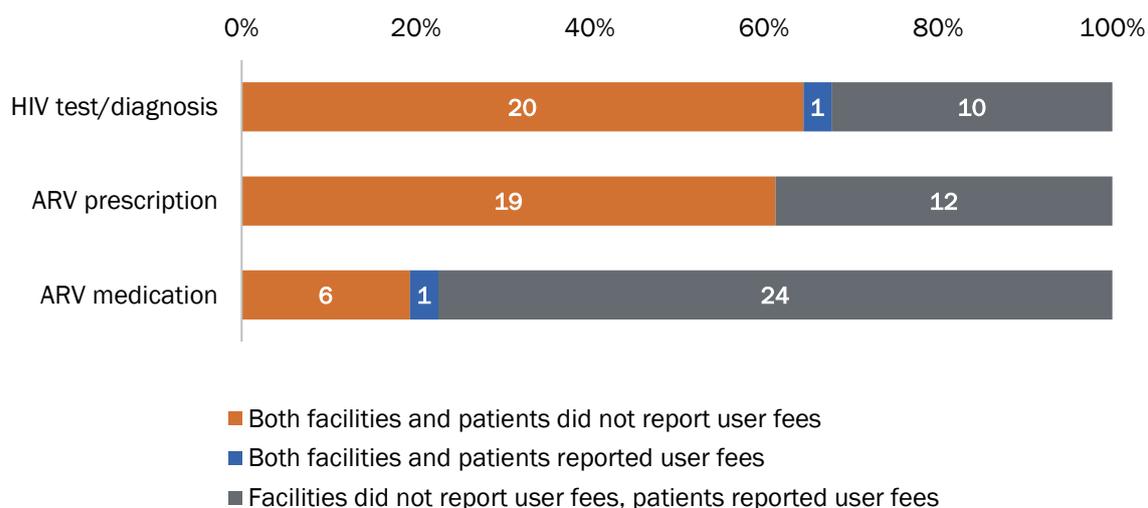


Percentages may not equal 100 due to rounding.

Do discrepancies exist between patients’ and providers’ responses regarding user fees?

Patients’ responses were compared to responses from providers to assess if discrepancies existed between the two. Most of the discrepancies were related to ARV medication charges, which may reflect that providers felt that these were informal or unallowable, given the context of these facilities being supported by PEPFAR. In 24 facilities (out of a total of 31), providers reported not charging for ARV medication but at least one patient in each of those facilities reported paying for the service. In six facilities, both providers and patients reported no user fees for the service; in one facility, both patients and providers reported user fees. For ARV prescriptions and HIV testing, discrepancies were found in 12 and 10 facilities, respectively (Figure 4). This mismatch between patient- and facility-reported user fees in combination with some variation in providers’ responses within facilities suggests that some charges may be of an informal nature.

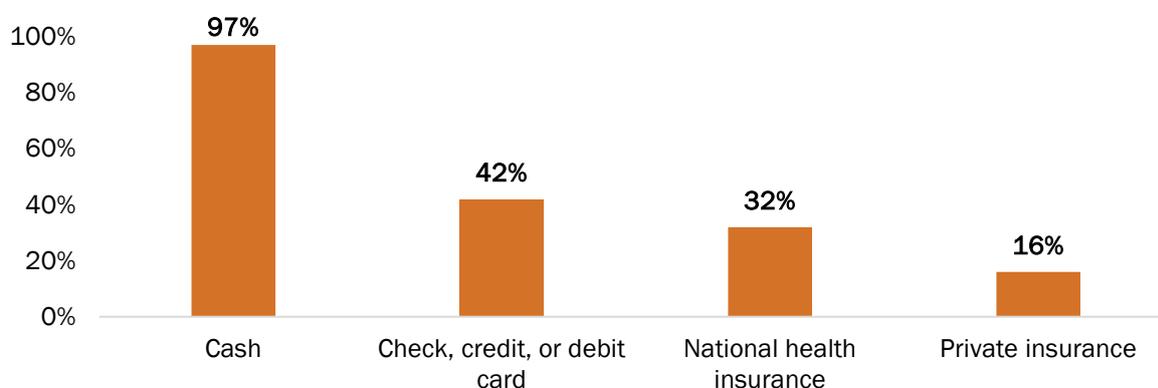
Figure 4. Matching Facilities' and Patients' Reporting of User Fees



What happens when patients cannot pay the fees charged for their HIV service?

It is important to note that the sample of patients in the study, by the nature of a facility-based survey, included only those patients with the financial and physical capability to travel to the facility and request HIV care. Figure 5 shows the types of payment received from patients in the facilities (as reported by the providers).

Figure 5. Types of Payments Accepted at Facilities



Facilities reported providing a wide array of options for patients who could not afford the payments, including providing the service for free, deferring payment, reducing fees, offering support from a case worker, etc. Only 3 out of 61 representatives of facilities reported denying the service when patients could not pay. However, the fact of denial or non-denial of services was not observable or verifiable.

Recommendations

The high burden of direct user fees for clients seeking HIV testing is a considerable problem in improving Nigeria's overall HIV cascade of care, given that many people living with HIV in Nigeria do not know their status. Further analysis is needed to understand how reducing these costs on a larger scale across Nigeria would impact those at risk of acquiring HIV to seek testing at facilities and whether this would increase the case identification performance in states with high prevalence of such fees.

Shifting more ART patients to differentiated service delivery with multi-month scripting as appropriate would reduce exposure to direct fees and indirect costs. In the four states included in the study, people living with HIV went to facilities to refill their ARV medication an average of eight times per year. Under a differentiated care model for ART, both the number of clinical visits and medication refills can be reduced by adapting treatment guidelines that match the need for facility visits for clinical consultation, laboratory diagnostics, and ARV prescription pick-up to patient characteristics such as age, adherence behavior, and virologic or immunological response to ART (especially those who show stability and progress on viral suppression). Under a possible differentiated care model, a new patient in Nigeria may be expected to have four to six clinical visits and two to four refill visits annually; a stable continuing patient is expected to have one to four clinical visits and two to four refill visits. In Table 4, HP+ compares the costs to patients. For characterizing the current model, HP+ conservatively assumes that ARV refill and clinical visits happen concurrently. Based on this analysis, adopting a differentiated care model could lead to significant savings for people living with HIV, up to US\$52 annually—or the equivalent of one month's minimum wage in Nigeria. Scaled-up implementation and greater uptake of this model will not only yield savings for patients, but also efficiency gains on the provider side and reduced wait times—an issue highlighted as being of importance to patients when surveyed. Overall, gains from a differentiated care model can be used to manage more patients with the same facility infrastructure in place.

Table 4. Annual Costs and Savings for People Living with HIV Under a Differentiated Care Model for ART

Type of Fee or Cost	Current Model Cost	Differentiated Service Model New Patient (Minimum-Maximum)		Differentiated Service Model Stable Patient (Minimum-Maximum)	
		Cost	Savings	Cost	Savings
Direct fees (NGN)	16,160	7,264 (5,244-8,284)	8,896	5,759 (3,438-8,080)	10,401
Indirect cost (NGN)	9,528	9,528 (7,146-11,910)	N/A	6,551 (3,573-9,528)	2,977
Total costs to patient (NGN)	25,688	16,792 (12,390-21,194)	8,896 (4,494-13,298)	12,310 (7,011-17,608)	13,378 (8,080-18,677)
Total costs to patient (US\$)	\$71.36	\$46.64 (\$34.47-58.87)	\$24.71 (\$12.48-36.94)	\$34.19 (\$19.48-48.91)	\$37.16 (\$22.44-51.88)

Shifting patients to pick up ARV refills closer to home using an extensive private pharmacy base in Nigeria may also reduce indirect costs faced by patients. Based on the HP+ survey, patients spend an average of nearly four hours traveling to the facility and waiting for ARV

medication pick-up or refills. Together with the transportation costs, this represents a total of NGN 1,200 (US\$3.30) in indirect costs. Contracting with private pharmacies under a decentralized drug pick-up system to allow ARV refills will unburden people living with HIV from waiting at facilities. People living with HIV will also not be limited to getting their refills during HIV clinic days where a higher volume of patients is expected. This could substantially reduce the indirect costs incurred by people living with HIV. Use of private pharmacies and facilities for ARV prescriptions is already occurring in Nigeria under the PEPFAR-approved Multi-Month Dispensing model, which could be more rapidly implemented.

The reasons Nigerian health facilities charge user fees in public facilities need to be better understood so that they can be adequately addressed. Charges may be used as facility revenue in order to fund recurrent costs. In this case, the cause may be driven by insufficient funding to cover overhead costs and/or health workers' compensation. A cause of such fees could also be poor health worker motivation or desire for personal income, resulting in informal charges. If the main reason for charging fees is a desire to add to facility revenue, a number of health financing policies could be considered to mitigate these issues and deter facilities from passing on such costs to patients, such as:

- Scaling-up state-level health insurance schemes to include people living with HIV. The national health insurance scheme in Nigeria runs parallel to state-level health insurance schemes that are at various stages of rollout and implementation. Some states have yet to set up their own health insurance schemes. Scale-up of these schemes will allow for pre-payment of the costs of registration, clinical consultations, and basic laboratory tests for beneficiaries, such that no fees are required out of pocket at the point of care. Premium costs are often subsidized for the poor, benefitting vulnerable groups among people living with HIV. Health insurance coverage also encourages timely care as it removes financial barriers to seeking care—a critical factor for people living with HIV to minimize their risk of developing opportunistic infections.
- Integrating other aspects of HIV care still exacting costs, such as specific tests or medicines, hospital costs, etc., into the state health insurance schemes. This will provide additional financial protection to people living with HIV. Phased implementation is possible following an assessment of which components of care remain outside the package of coverage. The total impact on user fees will depend on the extent of scheme coverage and financial sustainability, which may vary from state to state.
- Channeling more domestic resources from state governments to public facilities. This could reduce or fully eliminate the motivation to charge user fees as a source of facility revenue.

It is essential to continue to improve evidence on the prevalence and magnitude of financial barriers to HIV service utilization. A household- or community-based survey covering states in all six geopolitical zones/regions in the country would allow for the inclusion of responses from people living with HIV who are not accessing care and would create a more precise and comprehensive picture of HIV careseeking behavior in Nigeria. Through such a survey, a more detailed instrument could be fielded to capture household budget, income, and the possibility that HIV-related direct fees and indirect costs could be potentially catastrophic health expenditures (above a threshold of total consumption expenses), pushing households into poverty.

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