User Fees and Access to HIV/AIDS Services in Cameroon

René Bonnel

August 27, 2019

Table of Contents

Executive Summary	iv
Introduction	1
Background	2
Increasing access to Universal Health Care	3
Health Challenges: Supply and demand -side constraints	5
The changing role of user fees: When the solution became the problem	10
Insufficient generation of funds and lack of equity	10
Adverse impact on access and outcomes	11
Current status of user fees in Sub-Saharan Africa	14
Cameroon: Financial Barriers and HIV/AIDS	15
Elimination of user fees for malaria and HIV/AIDS: pitfalls and challenges	18
Performance-Based Funding	23
Improving access to health services by providing vouchers	24
Conclusions	26
Bibliography	31

Table 1: Estimated resources and cost of high priority interventions for UHC (CFAF Billion) 4
Table 2: Percentage of HIV/AIDS facilities experiencing stock shortages
Table 3: Incidence of catastrophic health expenditures in Cameroon
Table 4: Life expectancy in SSA countries with health expenditures less than Cameroon
Table 5: Impact of removing user fees: results from longitudinal data
Table 6: Effects of user fees on monthly attendances and diagnoses at 13 health centres in Neno
District, Malawi
Table 7: Effect of Performance-Based Funding on households' health care spending14
Table 8: Effect of Performance-Based Funding on HIV testing in Cameroon
Table 9: Access and cost of antiretroviral treatment in Cameroon (2007) 16
Table 10: Monthly Out-of-Pocket expenditures (OOP) for PLWH receiving treatment in Yaoundé,
2006
Table 11: Percentage of facilities charging more than the official prices
Table 12: Cost of HIV/AIDS services in Centre and Littoral Regions
Table 13: Estimated cost of the elimination of official fees for HIV/AIDS in public health facilities
and community-based health centres (FCAF million)19
Table 14: Average and range of official fees (CFAF) for HIV and antenatal care in public health
facilities
Table 15: Cost of other fees for HIV/AIDS treatment
Table 16: Impact of voucher ("Chêque Santé") on maternal and neonatal deaths per year 25

Figure 1: Top 10 causes of disability-adjusted life years (DALYs) in 2017 and percentage change	зe,
2007-2017	. 2
Figure 2: Cameroon HIV infections and AIDS-related deaths	. 3
Figure 3: Domestic government health spending as % of GDP in SSA countries	. 7
Figure 4: Out-of-pocket expenditures (OOP) as % of health expenditures in SSA countries	. 8
Figure 5: Changes in household economic status due to health expenditures, 2012	. 9
Figure 6: Fees for HIV services in health facilities in Yaoundé before Voucher Initiative	22
Figure 7: Fees for HIV services in health facilities in Douala before Voucher Initiative	22

Executive Summary

Cameroon's health policy has been evolving significantly in recent years. In 2016 the government adopted a Health Sector Strategy for 2016-2027 that adopted Universal Health Care (UHC) as a long-term goal. As shown by the experience of other countries UHC cannot be reached without improving both the quantity and quality of health services while modifying the way health services are funded. In the case of HIV/AIDS, financial barriers have been shown to be a barrier to increasing the coverage of services and improving health outcomes. Currently, user fees remain the main source of funding for health facilities. However, in April 2019 the government took the decision to eliminate these fees with an implementation date of January 2020.

This paper reviews the role of financial barriers in Cameroon and the experience of countries that have eliminated such fees with a special focus on HIV/AIDS. It also estimates the financial cost of eliminating official user fees for HIV/AIDS and highlights the prerequisites needed for their elimination to be successful. The main conclusions are as follows:

First, there is a need to convince Cameroon's population that **more resources** should be allocated to health. The first step would be to **revitalize the priority given to the health budget**. In 2016, domestic government health expenditures amounted to only 3% of government expenditures¹, and since then, the budgetary allocation given to the Ministry of Health has fallen further from CFAF 236 billion in 2016 to CFAF 208 billion in 2017 and CFAF 176 billion in 2018.

A key reason for giving priority to the health budget is that a major driver of the projected increase in health expenditures is health system cost. As mentioned in various studies, about 70% of the incremental resources needed for funding a package of essential interventions represent investment in additional health facilities, health workers and management systems. Since these are unlikely to be funded by external aid, a major increase in domestic resources for health would have to take place.

Second, a **greater prioritization of expenditures** is required. Current spending programmes do not give sufficient emphasis to critical public health programmes with high effectiveness and positive externalities. While the government has identified a priority list of 185 interventions for progressing towards UHC, the estimated cost far exceeds the available resources. To move forward toward UHC, the government may want to select a subset of interventions that would receive high priority with the goal of increasing access to these interventions. These would include the seven most important contributors to Cameroon's burden of disease namely HIV/AIDS, malaria, neonatal disorders, diarrheal diseases, lower respiratory infections, congenital defects and tuberculosis.

Third, the policy agenda needs to focus on **designing delivery and payment systems that supports performance and efficiency**. Two systems currently being implemented in Cameroon offer a way forward: Performance-Based-Funding (PBF) and vouchers (the "Chêque Santé") and the Voucher Initiative for HIV/AIDS. So far, these systems have been implemented in parallel,

¹ Expenditures funded from domestic budgetary revenues. These exclude the external aid provided to the Ministry of Health.

but as shown by the evaluation of results, there is a strong complementarity between the PBF – which can improve quality on the supply side but leaves financial barriers in place- and vouchers which can address financial barriers on the demand side, but are not well equipped to improve quality and monitor results.

Fourth, there is a strong body of evidence suggesting that the **dependence of Cameroon's health system on out-of-pocket expenditures is excessive and inefficient**. To move forward, the government decided on April 2019 that all HIV/AIDS services will be provided free of charge. This is a courageous decision, but it has to be followed by a transfer of funds from the government budget to health facilities to compensate them for the loss of revenues. Otherwise, health facilities will simply replace official user fees by unofficial user fees as happened in 2011 when it was decided to eliminate official fees for the treatment of simple malaria. As shown by a later evaluation, official fees were simply replaced by unofficial government fees.

As the elimination of fees is scheduled to take place in January 2020, there is still time to take the preparatory steps to increase the likelihood of success. Main conclusions and suggestions are the following:

- (i) The elimination of fees may have to take place in steps. Currently, there is a wide diversity of official fees found for the same service across health facilities of the same category. As a first step, the official user fees for consultation and HIV testing seem to be the easiest to eliminate. Currently, the official fees for consultation and HIV testing are being applied in the great majority of health fees and there are only a few instances where informal fees are being charged. For 2020, the estimated cost would be CFAF 3.1 billion CFAF.
- (ii) Taken all together, the elimination of official user fees can be funded by the government budget. Current estimates suggest that the elimination of official user fees for consultations (including antenatal care) and biological exams (HIV tests, viral loads and CD4) would cost about CFAF 4.8 billion in 2020. To fund it, the current value-added tax would have to increase by 0.3%, which is not a large amount.
- (iii) However, the budgetary cost would be much greater if informal fees are also to be eliminated. An indication of the cost is provided by a recent survey of health facilities in the Centre and Littoral regions. Informal charges ended-up increasing the cost of a package of HIV/AIDS services (consultation, HIV testing and viral load) by about 50% to 100%. However, more data would be needed before an accurate estimate of the cost of the elimination of informal fees for HIV/AIDS services could be made.
- (iv) An important issue to be addressed is the wide variation of official fees for laboratory exams, pre-therapeutic tests and pregnancy tests. These fees have not been increased for a long time which suggests that these fees are likely to be obsolete and may need to be substantially harmonized across health facilities and increased to cover the operating costs of health facilities. In addition, there are administrative fees for opening of files and refilling antiretroviral prescriptions, and health facilities continue to require pre-

therapeutic tests, which are not required for initiating treatment. These procedures are largely the result of the cost recovery system in place. Being input-based, the current reimbursement system gives strong incentives to health providers to increase the number of tests as a way of boosting their revenues and compensating for the low level of official user fees. To change incentives, the management of the health system has to evolve towards a performance-based system.

- (v) The government may want to take advantage of the Performance-Based-Funding (PBF) for transferring funds to health facilities. The government has already taken a decision to transfer budgetary lines to the PBF, and since the benefitting health facilities are obligated to have a banking account, the transfer of funds can be directly done from the PBF to health facilities.
- (vi) It would be useful to include two voucher initiatives currently in place: namely the Chêque Santé" and the Voucher Initiative for HIV/AIDS. These initiatives are aimed to address financial barriers that prevent some population groups from accessing health services. As they operate on the demand-side, they would provide a useful complement to the PBF which is mainly designed to improve the quality and quantity of health services.

Introduction

Cameroon's health policy has evolved significantly over the years. In the 1980s, the country put in place a policy of primary health care emphasizing the participation of the beneficiary communities in the financing and management of health care facilities. The reforms introduced user charges in government health facilities with provisions for retaining most of these fees at the site of collection. A major reason was financial pragmatism: at that times, most countries were implementing macroeconomic adjustment policies with a central focus given to budgetary austerity while experiencing slow economic growth.

Cameroon's experience reflects these constraints. During the 1990s the country economic growth rate averaged only 0.4% per year, allowing little room for boosting government health expenditures and user fees continued to play an important role in the funding of health expenditures. In recent years, however, the global environment changed. The adoption of the 2030 Agenda for Sustainable Development adopted by the United Nations General Assembly in 2015 gave a strong boost to the notion that access to health was a fundamental human right and that countries should accordingly implement policies aimed at providing universal health care to their population (United Nations 2015). This goal has been adopted by the government of Cameroon.

In 2016, the Government adopted a new Health Sector Strategy 2016-2027 that proposed that Cameroon be a "country with universal access to quality health services for all social strata by 2035 with the full participation of communities" (Ministère de la Santé Publique 2016). This strategy prioritizes the following five strategic objectives:

- 1. Health Promotion: Bring the population to adopt behaviours conducive to their health
- 2. Disease prevention: Reduce premature death due to preventable diseases
- 3. Management of curative health care: Reduce mortality and lethality in health facilities
- 4. Health system strengthening: Improve the institutional capacity of health facilities to ensure a sustainable and equitable access of the population to health care and services
- 5. Governance and strategic management: Improve the performance of the health systems at all levels.

As shown by the experience of other countries, improving health outcome is a long-term process that involves both improving the quantity and quality of health services –the supply side, and reforming the way health expenditures are funded by households –the demand side. A most important step is to change the way the health system is currently funded, in particular by reducing the role of user fees in the funding of health expenditures.

Measures to that effect have been decided by the government in the case of HIV/AIDS with the goal of accelerating progress towards the 90-90-90 targets for HIV/AIDS testing, treatment and care proposed by UNAIDS in 2014². To alleviate the financial constraints preventing households

² The 90-90-90 targets state that: (a) 90% of all people living with HIV know their HIV status; (b) 90% of all people with diagnosed HIV receive antiretroviral treatment; and (c) 90% of people receiving antiretroviral treatment achieve viral suppression.

from accessing HIV/AIDS services, the Government decided in April 2019 that all HIV/AIDS services and ANC consultations will be provided free of charge in public health facilities and accredited community-based health centres, starting in January 2020. Previous steps to reduce financial barriers included providing antiretroviral drugs free of charge, but there were other user charges in place, in particular for HIV testing and laboratory works as well for the treatment of opportunistic infections. The objective of the April 2019 measure is thus to provide all HIV/AIDS services free of charge when delivered in public health facilities and other health centres that have been accredited. It also stipulates that all the required medicine and supplies for HIV/AIDS would be provided free of charge.

This paper reviews the issues raised by the elimination of fees, including the budgetary implications as well as the expected benefits. The first section summarizes the country's health challenges. The second section summarizes the evidence on the importance and effects of financial barriers on accessing HIV/AIDS services in Cameroon. The third section reviews how the proposed measures could be implemented in a manner that is financially sustainable.

Background

During the last two decades, the country achieved considerable progress on social indicators. For instance, between 1990 and 2017, life expectancy rose from 52 years to 58 years, the under-5 deaths fell from 136 to 74 deaths per 100,000 live births, and the burden of disease was substantially reduced among its population with rapid progress in the case of malaria, HIV/AIDS and diarrheal diseases (Figure 1).

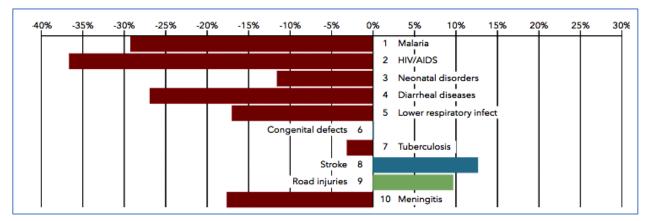


Figure 1: Top 10 causes of disability-adjusted life years (DALYs) in 2017 and percentage change, 2007-2017

Source: Institute for Health Metrics and Evaluation, 2019

Nevertheless, health outcomes continue to be a pervasive problem. Looking at HIV/AIDS, the HIV prevalence decreased from 5.5% in 2004 to 3.8% in 2016, largely as a result of a steady decline in new infections (19% fall since 2010) (Figure 2), but the progress in reducing AIDS-related deaths has been much slower. Despite scaling-up of the number of people on

antiretroviral treatment, AIDS-related deaths have remained high and it is only recently that they have started to decline.

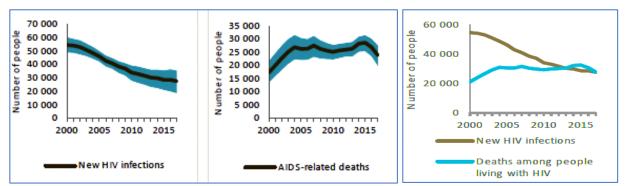


Figure 2: Cameroon HIV infections and AIDS-related deaths

Source: UNAIDS data 2018 reference (UNAIDS 2018)

Overall, these achievements appeared insufficient for attaining the 90-90-90 targets for HIV testing, treatment and care. In its 2018 report, UNAIDS stated that: "The global AIDS response is at a precarious point—partial success in saving lives and stopping new HIV infections is giving way to complacency. At the halfway point to the 2020 targets, the pace of progress is not matching the global ambition" (UNAIDS 2018). This call for action was heard by the government. Spurred by high level commitment, specific efforts were devoted to operationalizing the country's strategy of HIV testing and treatment for all. In 2017, 3.6 million HIV tests were carried out and the proportion of people living with HIV and knowing their status reached 71% (the first component of the 90-90-90 targets).

New policies were also put in place to accelerate access to antiretroviral treatment by expanding the number of health centres equipped to provide antiretroviral treatment. By the end of 2018, 52% of people living with HIV in Cameroon were on antiretroviral treatment (the second target of the 90-90-90 goals). Most significant has been the results for pregnant women living with HIV: the proportion on antiretroviral treatment rose from 14% in 2012 to 80% in 2019 (UNAIDS 2019). These achievements are substantial, but they cannot be sustained without implementing a comprehensive reform of the health system.

Increasing access to Universal Health Care

In recent years a number of initiatives have been launched to increase the coverage of Cameroon 's health services. A widely quoted study estimated the cost of providing Universal Health Coverage at US\$86 (McIntyre and Meheus 2014). But this figure was in fact based upon a previous estimate (WHO Task force on Innovative International Financing for Health Systems 2010) that was updated to reflect 2012 prices. Since then, there have been various efforts to provide more comprehensive estimates that would reflect the cost of reaching Universal Health Care, and not surprisingly, the estimated costs have been rising. For instance, the 2018 Disease Control Priorities 3rd edition (DCP3) selected a set of 218 high priority interventions and estimated its costs per capita to amount to US\$76 for low-income countries and US\$110 per capita for lower-middle income countries.

In 2015 Cameroon started to develop its own estimate of the cost of reaching Universal Health Care. A National Technical Group was set up to define the coverage, the type of interventions that would be covered, the funding that could be mobilized and the cost of various scenarios. In total, 185 high priority interventions were selected to be included in an essential health package. Cameroon's estimates were further revised in 2018 to take into account the average annual cost of the Health Strategy (CFAF 485 billion) as well as the cost of scaling up interventions included in the essential health package (US\$1.1 billion) with a total cost projected to reach of CFAF 1.4 billion in 2018 and 2019 and CFAF 1.8 billion by 2027 (MInistère de la Santé Publique 2018).

On a per capita term, this estimate (US\$86) is the same as the old estimate of McIntyre and Meheus, updated from WHO earlier estimate, suggesting that the estimated cost was not out of line. Nevertheless, it could not be matched by existing and projected resources. In the low resource mobilization case scenario, an average annual gap of CFAF 800 billion would remain during the projection period from 2018 to 2027. This gap would only disappear over the longer-term (i.e. by 2027) but it would require Cameroon to: (i) implement a major resource mobilization effort, and (ii) allocate all the resulting resources would have to health, an hypothesis that seems unlikely in view of the country's other budgetary priorities.

Earlier on, the National Technical Group had proposed three possible scenarios for progressing toward UHC (Ministère de la Santé Publique 2017). Under the first scenario, priority would be given to children under five, vaccinations and maternal healthcare. The second scenario would add the group of children aged 5 to 15. Finally, the third scenario would aim for a progressive increase in the coverage of interventions.

As shown by Table 1, the first scenario could be funded without having to resort to a substantial mobilisation of new tax revenues. The projection of resources correspond to the low case scenario mentioned in the 2018 report of the Ministry of Health (MInistère de la Santé Publique 2018), but they exclude the so-called "innovative financing". The good news is that these resources are sufficient to fund a priority programme of interventions targeting children under five, vaccinations and maternal care and leave room for further expanding the list of interventions to include some of the most important contributors to Cameroon's burden of disease.

	2019	2020	2021	2022
Resources				
Compulsory payments (private and public sector)	87	92	97	103
Informal sector	37	77	120	151
Budget of Ministry of Health	244	256	269	280
Total domestic resources 1/	368	425	486	534
Cost of programmes for children under-five, vaccination and obstetric gynaecology	320	325	331	336

Source: Évaluation des contributions mobilisables par source de financement de la santé au Cameroun. Ministère de la Santé Publique. Septembre 2018.

Note: 1/ Domestic resources represent the low estimate in the 2018 report, but it excludes "innovating financing".

Implementing this programme would address some of the critical health needs of the country, but not all of them. As shown by Figure 1, the top seven contributors to Cameroon's burden of disease are malaria, HIV/AIDS, neonatal disorders, diarrheal diseases, lower respiratory infections, congenital defects and tuberculosis. While neonatal care, diarrheal diseases, respiratory infections, malaria are included in scenario 1, HIV/AIDS, opportunistic infections and tuberculosis are not included. To better address the country's health priorities, the government may need to devote additional resources to these areas.

In order to identify existing entry points for improving the access to health services, it is useful to first review the key bottlenecks affecting the supply and the demand of health services in Cameroon. The objective is not to provide a detailed analysis of all health-related issues as this has been done in other studies, but rather to highlight some of the constraints that especially affect the delivery of HIV/AIDS services.

Health Challenges: Supply and demand -side constraints

As is common to many low and lower-middle income countries, Cameroon is far from being in a position to provide universal health care to all its population. Its total health expenditures (US\$65 per capita) are much below the levels that have been generally advanced as being necessary for providing universal health care³. However, the country could do much better. With a per capita income of US\$1,440 in 2018, Cameroon belongs to the category of lower-middle income country, but its health outcomes correspond to countries with much lower levels of income. Such a result suggests that while there is certainly a case for increasing the resources allocated to health, there are major inefficiencies in the way the health system is run and is delivering services. These inefficiencies arise from constraints that affect both the supply and the demand of health services.

Supply-side constraints

Effective management of the health system is made difficult by the prevalence of four types of constraints on the supply side that include: (i) limited physical access to health facilities; (ii) poor availability of basic medical equipment and essential medicines; and (iii) lack of government funding.

The first critical bottleneck is **the limited access to health care**. On paper, Cameroon has a relatively high density of health facilities. In 2016, its health sector consisted of 5,853 facilities, of which 46% were managed by the public sector and 54% were run by the private sector (civil society groups, faith-based organizations and for-profit establishments) (Ministère de la Santé Publique 2016). On a per capita basis, health facilities averaged 0.8 hospitals per 100,000 population, which is comparable to the average for sub-Sahara Africa (0.8) (WHO 2015).

Taking into account the population distribution, households would seem to have a much better access to health care than other sub-Saharan African countries. In a recent survey of health clinics

³ As an example, the Disease Control Priorities 3rd edition (DCP3) (2018) estimated that delivering a set of 218 high priority interventions for UHC would amount to an additional cost of US\$110 per person.

in 36 African countries, Cameroon's health facilities were found to be the most easily accessible (i.e. within walking distance) in 96% of the areas that were surveyed (Annex, Figure A1). However, Cameroon's dense network of clinics is not reflected in its population's access to health care. When asked, 59% of the people who were surveyed reported that they or someone in their family could not get health care or medicine in 2014-2015 (Annex, Figure A2). Among those who managed to get health care, 51% reported that it was difficult to obtain care.

A key factor accounting for this result is the **poor availability of essential medicines and equipment**. In a survey of medical supplies and basic equipment, it was found that the availability of basic equipment ranged from 70% in the North region to a high of 94% in the North-West Region⁴, but the availability of essential medicines was much lower in other regions⁵, ranging from 54% in Adamawa and 50% in the North to 71% in the North-West and Far North (World Bank 2018). A similar result is observed for HIV/AIDS medicines and supplies. Recurring shortages are a persistent characteristic of HIV/AIDS medicines and supplies (Table 2) despite substantial funding provided by external aid. According to the regular monitoring provided by *Treatment Access Watch* (TAW), shortages are particularly prevalent in the case of reagents for CD4 as well as reagents for HIV diagnostic test. According to the survey by TAW, 80% of the HIV/AIDS health centres ("Centres de Prise en Charge") were missing CD4 equipment in 2016.

	2014	2015	2016
Antiretroviral treatment	18.8%	2.2%	6.7%
Biological exams (average)	63.1%	23.5%	23.5%
Initial exam (bilan d'orientation)	23.9%	31.2%	23.3%
Test (bilan pre-thérapeutique)	15.5%	17.6%	18.9%
Follow-up (bilan de suivi)	23.7%	21.7%	21.4%
VIH test	0.8%	0.6%	6.7%

Table 2: Percentage of HIV/AIDS facilities experiencing stock shortages

Source: TAW rapports annuels 2016, 2015, 2014

Low domestic government funding. Currently, Cameroon's health sector consists of three different levels: the central level that includes various types of hospitals, an intermediary level at the regional level and a peripheral level consisting of 189 health districts. The 2001-2015 health strategy initially envisaged the implementation of a decentralization policy aimed at amplifying the health services that would be delivered at the local level, but this policy shift has not been accompanied by a corresponding budgetary allocation of resources.

External health assistance amounts to 9% of total health expenditures with the majority of the funding concentrated into programmes such as HIV/AIDS, antiretroviral treatments, maternal and child health and immunizations. Such a percentage is slightly below the average for SSA (11.7%), most likely because of the much larger external assistance provided to some SSA

⁴ Basic equipment is defined to include at least one child scale, adult scale, tension meter, thermometer, stethoscope and electric light source (WHO's Service Availability and Readiness Assessment methodology).

⁵ These include ophthalmologic tetracycline ointment, paracetamol/acetaminophen, amoxicillin, packets of oral rehydration solution, zinc, iron, folic acid, and vitamin A supplements, and cotrimoxazole.

countries that are more heavily affected by the AIDS epidemic. In contrast, Cameroon's domestic government health expenditures (i.e. expenditures funded from budgetary revenues excluding external assistance) are strikingly low. As a percentage of GDP (0.6% of GDP in 2016), they were the third lowest in Sub-Saharan Africa (Figure 3).

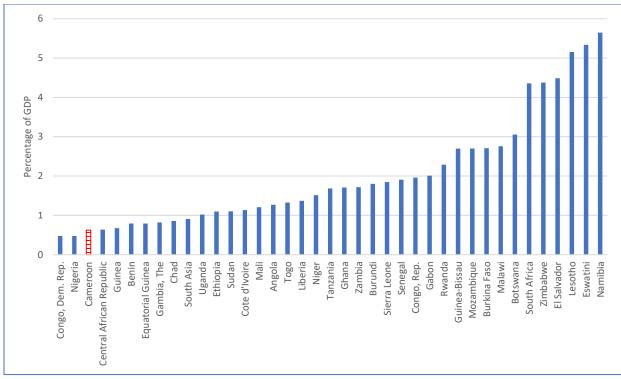


Figure 3: Domestic government health spending as % of GDP in SSA countries

Most of the public health budget remains allocated to the central administrative level. While the central agencies do transfer some resources to the regional and district level, the allocation of resources is based on the operational costs of existing health facilities. Such an allocation results in an unequal allocation of budgetary resources on a per capita basis across regions, and more important it does not match the population health needs (World Bank 2018). Faced with small budgetary allocations from the government budget, health centres, and especially those at the peripheral levels, rely on direct payments by households at the point of care for funding part of their recurrent costs.

The **high level of out-of-pocket expenditures (OOP) is a source of concern.** In 2016, Cameroon's OOP amounted to 70% of total health expenditures (Figure 4), the fourth highest level among sub-Saharan African (SSA) countries. This level of household spending is well above the average for lower-middle income countries (56%) as well as the regional average for sub-Saharan Africa (39%) (World Bank 2019) with substantial adverse impact on household welfare.

Source: World Development Indicators 2019

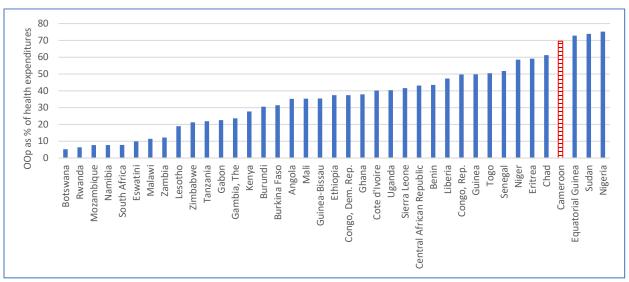


Figure 4: Out-of-pocket expenditures (OOP) as % of health expenditures in SSA countries

Source: World Bank Development Indicators 2019.

Cameroon's high share of household expenditures places the population at significant risk of financial catastrophe and impoverishment. Large out-pocket-payments and limited insurance coverage (less than 6% of the population is covered by any type of social health protection) (Ministère de la Santé Publique 2017) constitute a major financial risk. There are different ways of measuring catastrophic health expenditures, but the most common one is to define health expenditures as being catastrophic when they exceed specified thresholds such as 10% and/or 25% of income.⁶ In Cameroon, 21% of households spent more than 10% of their income on health expenditures, but 4.5% of the population spent as much as 40% (Table 3).

	<u>Percentage of income spent on hea</u> Less than			on health
	10%	15%	25%	40%
Percentage of population experiencing catastrophic health expenditures	21%	14.6%	8.6%	4.5%

Table 3: Incidence of catastrophic health expenditures in Cameroon

Source: Analyse situationnelle du financement de la santé au Cameroun. Ministère de la Santé Publique 2016.

One of the consequences of high health expenditures is impoverishment. Cameroon's poverty rate was 50.3% when health expenditures are excluded, but it increased by 2 percentage points when health expenditures are taking into account (Ministère de la Santé Publique 2016). Among the wealthier households, health expenditures can create a heavy cost in percentage terms that in some cases push these households below the poverty line (Figure 5). The health expenditures

⁶ The Sustainable Development Goals (SDG; indicator 3.8.2) monitor the goal of financial protection by using two thresholds: % of households spending more than 10% or 25% of household expenditures (United Nations 2015).

of the poorest households are not as large in percentage terms, but when facing catastrophic health expenditures, these households can also fall below the poverty line.

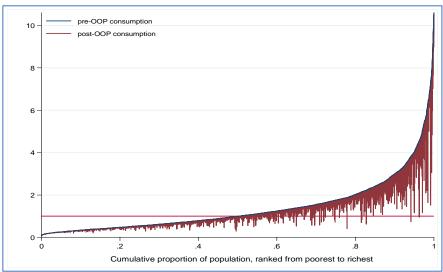


Figure 5: Changes in household economic status due to health expenditures, 2012

Source: ADePT analysis with National Health Accounts data (2012) from "Analyse situationnelle du financement de la santé au Cameroon." Ministère de la Santé Publique.

Note: Households are ordered from left to right by income level. The dark line represents the household income excluding out-of-pocket expenditures and the vertical lines illustrate the fall in income due to health expenditures. The vertical axis measures household consumption as a multiple of the poverty line.

Overall, the country could do better. In 2016, the country spent US\$65 per capita on health, less than the average for Sub-Saharan African countries, suggesting that the health sector was not receiving the same priority. But these expenditures were not providing the value for money that could be expected. Compared to other SSA countries, Cameroon's health outcomes correspond to countries with much lower levels of health spending. In 2016, twenty-two SSA countries were spending less on health than Cameroon, but 17 achieved higher life expectancy than Cameroon (58 years). Among that group, eight countries had lower per capita income and spent less than half than Cameroon on health, yet they all attained higher life expectancy (Table 4).

Health expenditures per capita (US\$)	Life expectancy above Cameroon (58 years)	Life expectancy below Cameroon	Number of countries
Less than Cameroon US\$65-US\$32	<u>9 countries:</u> Burkina Faso, Guinea, Kenya, Rwanda, Senegal, Tanzania, Togo, Uganda, Zambia	<u>1 country:</u> Guinea-Bissau	10
Less than US\$32	<u>8 countries</u> Benin, Eritrea, Ethiopia, Malawi, Niger, Gambia, Dem. Rep. Congo, Mozambique	<u>4 countries</u> Burundi, Chad, Mali, Central African Rep.	12
Number of countries	17	5	22

Table A. Life evenestan	av in CCA countries with	health ave anditures	lass than Camaraan
Table 4: Life expectance	Ly III SSA LOUITUTES WILLI	neulli experiultures	less than cumeroon

Source: data from World Development Indicators (2019)

The contrast between a dense health infrastructure and the poor availability of health care suggests that resources are not reaching peripheral facilities while the excessive reliance on OOP contributes to maintaining health inequalities and poor health outcomes. There is now growing agreement that user fees —and more generally out-of-pocket expenditures-- should be reduced and replaced by a more equitable system of financing that would reduce the risk of catastrophic expenditures (i.e. expenditures that push households below poverty thresholds).

The changing role of user fees: When the solution became the problem

User fees have been a long-standing feature of many health systems in Africa, but they became more important, starting in the 1980s. A major reason was financial pragmatism: at that times, most SSA countries were implementing macroeconomic adjustment policies with a central focus on budgetary austerity that limited the scope for increasing health expenditures. Faced with funding shortages, the alternative of raising additional revenues by imposing user fees looked attractive especially as it offered the potential of improving the quality of health services. Support for expanding the role of user fees came in the 1980s from an influential World Bank paper (World Bank 1987) that argued that charging patients for health services would (a) raise revenues; (b) provide revenues that could be used for addressing shortages of medicaments and other critical supplies; and (c) improve equity by exempting poor households from paying user fees. For various reasons, these expectations have not been met.

Insufficient generation of funds and lack of equity

It was initially hoped that user fees would provide the resources needed for increasing the quantity and quality of health services. An early example of this argument comes from an oftenquoted review that found that user fees helped increase the access to health care in Cameroon (Litvack and Bodart 1993). In this case, the improved availability of drugs reduced the time spent by households searching for alternative source of care which had the effect of lowering the cost of care and led to greater utilization of health services.

In aggregate, however, user fees could not generate the expected funding. Across countries, they were estimated to amount to about 7% of non-salary costs rather than the 15% that had been earlier projected by the World Bank (Singh 2003). This has limited the envisaged improvement in quality of services that was expected to result from a more regular availability of drugs.

Furthermore, the expected increase in equity through exemptions for the poor did not occur. In principle, poor households or other defined population groups were to be exempted from fees, but in practice exemptions were rarely implemented mainly due to the difficulty of distinguishing poor households from others. As a result, user fees acted as an effective barrier preventing poor households from accessing health care.

Further support for the reduction of user fees as a funding mechanism came from the WHO 2010 report that endorsed universal health care (UHC). This influential report identified the reliance on direct payments, including user fees, as by far the greatest obstacle to progress and suggested that countries instead raise funds through required prepayments that provide a more efficient and equitable base for increasing population coverage (WHO 2010).

Adverse impact on access and outcomes

Impact on access. Theoretical support for the elimination of user fees came from several studies that reviewed the experience of countries that had installed or removed user fees. In a comprehensive review of 26 studies covering 20 countries (mainly African) during the period 1995 to 2005, James found that user fees had led to decreased use of services in most cases (15 out of 26) (Annex Table A1) (James 2006). Interpretation of the results was, however, made difficult by shortcomings in the studies. that documented the effects of user fees. In most cases, the sample size was small, or the methodology did not make it possible to draw robust conclusions.

Generating robust evidence for low and middle-income countries is difficult, mainly because this implies that the studies have to rely on randomized controlled trials and quasi-experimental studies, which have the most appropriate methodology for deriving causal conclusions. This was the approach used by Lagarde who found five studies in Kenya, Uganda and South Africa that had used longitudinal data and were judged to be of sufficiently good quality to provide a solid base for deriving robust conclusions. Reanalysis of the data confirmed that the removal of user fees had led to a sharp increase in the utilization of curative services (Lagarde 2011). The increases in utilisation of health services were large, ranging from 30% to 50% right after the policy change to 18% to 93% one year after. Exception to this conclusion concerned ANC visits and children immunization that were found to increase much less (Table 5).

	Outcome	Impact just after the intervention	Impact 12 months after
Kenya 1988-1993	New monthly outpatient visits by women	43.6%	88.6%
(Moses 1992)	New monthly outpatient visits by men	49.2%	68%
Uganda 2000-2002	Average monthly No. of 1 st ANC visits (intervention sites)	-5.8%	4.7%
(Nabyonga 2005)	Average monthly No. of 1 st ANC visits (control sites)	-9.9%	-3.1%
Kenya 1990	Monthly No. of outpatient visits in district hospitals	48.4%	18.1%
(Collins 1996)	Monthly No. of outpatient visits in provincial hospitals	29.6%	18.1%
Uganda 2001-2002	Monthly average No. of outpatient visits of all patients	38.9%	41.3%
(Burnham 2004)	Utilization of preventive services (immunisation)	18%	41.6%
South Africa 1992-1998	No. of monthly outpatient visits by adults	50.8%	92.6%
(Wilkinson 2001)	Preventive services: No. of ANC visits	65.2%	36.2%

Table 5: Impact of removing user fees: results from longitudinal data

Source: (Lagarde 2011)

Impact on outcomes. Evidence from high-income countries helps understand better the chain of results from user fees to health outcomes. It highlights the role that user fees play in affecting timely treatment and regular access to medication. For instance, a systematic review found that increased cost sharing for prescription drugs was associated with adverse medical events such as hospitalizations and worsening clinical outcomes, which in turn resulted in more expensive medical services such as emergency visits (Goldman 2007). It also found that these effects may

be more severe among low-income groups, whose high-rate of chronic health problems and low incomes may result in more price-sensitive behaviour.

Information on the impact of user fees in low- and middle-income countries comes from a recent review of the effects of user charges (Qin 2019). Some 17 studies from 12 countries were found to meet the selection criteria (randomised controlled trials or quasi-experimental study designs). The main conclusions were that:

- Reducing user charges increases access to healthcare. Among 14 studies reporting healthcare use, 12 found increased access to health care.
- The link between increased access to health services and improved health outcomes is much weaker, but this depended on the type of health outcomes being measured, the populations benefitting from the reduction and the policy settings. Among the 14 studies reporting the impact of user fees, nine found an improvement in health outcomes.
- Overall, the relationship between user fees and health outcomes was much more evident in studies that focused on children and lower-income population. This was the case of six out seven studies that found improved health outcomes for children and infants following a reduction in user charges⁷. Similarly, seven out of nine studies found that the removal of user fees improved the health outcomes of the poor.

Indirect effects of user fees for general health care on HIV and malaria. Four Sub-Saharan African countries (Malawi, Burundi, Tanzania and Cameroon) provide indications that user fees for general health care can also affect preventive health services.

Malawi had been providing free public health care since the 1960s, but 24% of health centres are operated independently by the Christian Health Association of Malawi (CHAM) and most of them charge fees. In recent years, there have been several changes in the implementation of user fees in the health centres operated by CHAM, which provided an opportunity for examining the effects of introducing and removing user fees for general outpatients.

The outcomes that were examined were attendances, new malaria diagnoses and new HIV cases among the 13 health centres in the Neno district (Watson 2016). The introduction of fees from July 2013 to June 2015 was accompanied by a drop in the average number of outpatients by 68% and once fees were removed, outpatient attendance rose by 352% (Table 6). In the case of malaria, new diagnoses for young children and patients older than five years fell when fees were introduced and rose even much more (between 230% and 240%) when those fees were removed (third and fourth column of Table 6) (Watson 2016).

In the case of HIV, the number of newly confirmed HIV cases in people aged 15-49 decreased by 48% following the introduction of user fees for healthcare. These results indicate that despite HIV services being provided free, the introduction of fees for other health services contributed to a decline in HIV testing. The most likely reason is that the reduction in the number of

⁷ The studied countries were Georgia, Ghana, India, Mexico, South Africa and Vietnam.

outpatient visits in Malawi led to reduced opportunity for HIV testing as the majority of HIV testing takes place among outpatients.

Table 6: Effects of user fees on monthly attendances and diagnoses at 13 health centres in Neno District,Malawi

	Total patient attendances	New malaria diagnoses under-5	New malaria diagnoses over-5	New HIV+ patient 15-49
Introduction of user fees in July 2012-June 2015 (% change)	-68%	-18%	-56%	-48%
Removal of user fees in August 2013-Oct. 2015 (%change)	352%	230%	247%	n.a. 1/

Source: Watson et al. 2016

Note: Only one centre removed the fees which does not provide an adequate comparison.

Tanzania and Burundi. Other examples of positive external effects on preventive services can be seen in some of the PBF programmes for maternal and childcare. In the case of Tanzania, the payment for performance (P4P) scheme increased the provision of antimalarials during pregnancy that was one of the targeted indicators (2 doses of IPT), but the P4P programme also increased ANC visits, which were not among the targeted indicators (Binyaruka 2015). These results echoed those found in Burundi's evaluation of a PBF scheme that documented positive effects on components of care that were not directly incentivized (Bonfrer 2014).

Cameroon: Impact evaluation of Performance-Based-Financing (PBF). Recent information on the cost and impact of use fees is provided by the evaluation of the World Bank Performance-Based-Financing (PBF) (World Bank 2017). The PBF programme started in 2012 in 14 districts in three regions of the country and it was accompanied by a prospective random evaluation that used a combination of household and facility surveys to assess the impact of the interventions on maternal and child health services.

Impact on budget. As expected, the PBF was accompanied by a substantial increase in resources. On average, the increased funding provided by the PBF programme amounted to about 40% of the operational budget of the health facilities that were evaluated. Interestingly, this increase had unexpected side effects on user fees, both official and unofficial.

Impact on user fees. Compared to the control group, there was a reduction in official provider fees, but the difference was not statistically significant. However, unofficial provider fees were found to be much lower in the PBF group. Fees were also significantly reduced for laboratory and X-Ray fees and transport costs (Table 7).

	Provide	er fees	Laboratory and Transporte		
	Official	Unofficial	X-Ray fees	fees	
Control group (average expenditure in FCFA) Reduction in fees due to PBF	3,501 -1,495	4,235 -2,254*	2,651 -1,473*	922 -455*	

Table 7: Effect of Performance-Based Funding on households' health care spending

Note: * = significant at the 10% level

Source: World Bank Evaluation of Impact. Damien 2017

Impact on HIV testing. There was a substantial impact on HIV testing, resulting in 61 more patients per month being tested in PBF facilities than in control facilities (9.98 test per month). At the same time, the number of PMTCT fell in the control group during the 2012-2015 period, and it increased by 2 in the PBF group compared to the control group, but the difference was not statistically significant (Table 8).

Table 8: Effect of Performance-Based Funding on HIV testing in Cameroon

	HIV testing (average number of tests per month)	РМТСТ
Control group 2015	9.98	9.86
PBF (increase compared to base line)	61.1***	2.084

Note: *** significant at 1% level Source: Damien et al. 2017

Two factors most likely explain why HIV testing rose so much. On one hand, the PBF programme ended up nearly cutting in half the various fees paid by households in the PBF treatment group. And on the other hand, the quality of services improved. Due to additional funding, health centres were able to improve their medical supplies, and it seems likely that the improvements extended to the reagents and the equipment necessary for HIV tests, which had been previously revealed to be in short supply.

Taken together these studies provide compelling evidence that relying on user fees for funding health services is likely to affect adversely health outcomes. Faced with such mounting evidence, a growing proportion of countries in Sub-Saharan Africa have removed user fees with the objective of stimulating access to health services.

Current status of user fees in Sub-Saharan Africa

Historically, the exemption from user fees was limited to the area of immunization and in most countries infectious diseases (tuberculosis, malaria and HIV/AIDS) have been offered free of charge in 93% to 97% of the SSA countries (Figure 6). The underlying reasoning is that providing health services to the affected persons benefit not only those individuals but also others who face a lower risk of infection. Subsidizing such health interventions thus help reduce the spread of infections in the general population, but these benefits are not taken into account by people when purchasing such health services or medicaments which means that without subsidies, the demand for public health products would be too low. In theory, the optimal subsidy can be

calculated by estimating the private costs relative to social benefits, but this is generally complicated, even when possible. As a result, most governments have resorted to two common models for public health programmes: full subsidization or moderate cost-sharing.

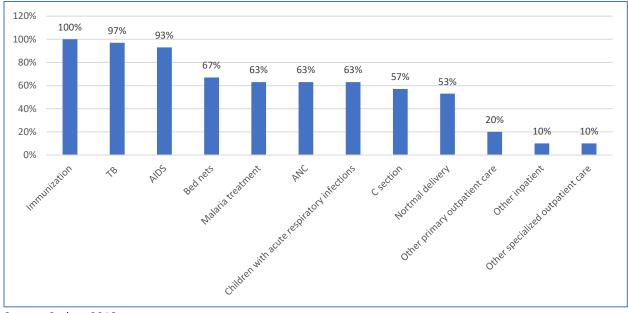


Figure 6: Percentage of SSA countries with no user fees

In the case of HIV/AIDS, antiretroviral drugs have been provided free of charge in most countries, but this has not been the case of other HIV/AIDS related services such as for HIV testing, viral load testing and health clinic visits. In Cameroon, there is mounting evidence that out-of-pocket expenditures incurred by households create a barrier to accessing HIV/AIDS services.

Cameroon: Financial Barriers and HIV/AIDS

Cameroon's national antiretroviral (ART) program was initiated in 2001 and it quickly achieved significant results. The first rigorous analysis was carried as part of an extensive national survey EVAL (ANRS 12-116) that covered 3,170 patients (Eboko 2010). This data showed that despite limited human and technical resources, ART programs performed better than other health centres (Boyer and al. 2010). When asked, only 22% indicated that it was difficult to obtain an appointment with a doctor, which showed that health professionals recognized the importance of treating PLWH in priority. This is confirmed by the survey which found that 88.8% of the patients rated the attention given by medical staff as high or very high (Table 9).

However, people living with HIV (PLWH) faced a high financial burden. The EVAL survey showed that PLWH under treatment had low income (CFAF 40,000 per month) with 74% living below the poverty line (Table 9). For 44% of the PLWH health expenditures were "catastrophic"⁸. Two

Source: Cotlear 2018

⁸ Catastrophic expenditures are defined as healthcare spending that represents at least 20% of household's total income.

factors contributed to the high financial burden: first, households incurred Out-of-Pocket expenditures as antiretroviral drugs were subsidized, but not entirely free, and they also had to pay for doctors' visits, laboratories and other tests; and second, there were unofficial payments required by health providers (in part to offset the low level of the official health fees that were irregularly adjusted).

People living with HIV and receiving treatment	N= 2466
Age (median)	36.8
Women	70.8%
Men	29.2%
Household income (median, CFAF)	40,000
Living below poverty lines	74.7%
Monthly health expenditures	
Median, CFAF	7,000
% of income	17.0%
Catastrophic health expenditures	44.4%
Delay between diagnostic and 1 st consultation	
Less than 1 month	57.9%
1 to 6 months	27.5%
6 months or more	14.6%
% stating that:	
Getting an appointment with a hospital doctor is difficult	21.2%
Attention paid to patients' problems by medical staff is high or very high	88.8%

Table 9: Access and cost of antiretroviral treatment in Cameroon (2007)

Source: Enquête EVAL – Anrs 12 116 (Boyer et al. 2010).

Additional information on the breakdown of out-of-pocket expenditures (OOP) is provided by the PLWH receiving treatment in Yaoundé (Table 10) (Boyer, Marcellin and al. 2009). The income of the PLWH receiving treatment in Yaoundé was higher than the national average, but the share of OOP in their income was nearly the same (15.6%) as the national average reported in Table 9. Unlike most other countries, transport did not seem to be an important expenditure (CFAF 1000), which is consistent with the previous finding of a relatively dense network of health facilities. Statistical analysis of these results showed that OOP was an important factor accounting for interruptions in antiretroviral treatment.

	Monthly OOP (CFAF)	Percentage of OOP
Purchase of ART	3,000	30.6%
Doctors' consulting fees	1,600	16.3%
Transport cost for hospital	1,000	10.2%
Biological tests, hospitalization and other costs	4,200	42.9%
Total Out-of-Pocket expenditures	9,800	100%
Median monthly income	63,000	

Source: Marcellin 2008

These results proved influential: in 2007 a policy of free antiretrovirals was introduced in Cameroon, but it did not solve all the financial hardships experienced by people under treatment. Other expenditures (laboratory tests, medical consultations, transport) remained to be paid by PLWH, amounting still to 11% of the income of PLWH. In addition to these official charges levied by health centres, there are also unofficial charges that are widespread and seemed to be a permanent feature of the health system as shown by recent data.

Unofficial charges. Based on the data collected by Treatment Action Watch (TAW) from 2014 to 2016, it is apparent that unofficial charges are widespread throughout Cameroon's health facilities and that they affect all aspects of HIV/AIDS services (Table 11) (Treatment Action Watch 2016)⁹, a policy that can be explained by the fact that the official fees had been fixed in 2007 and had not been adjusted regularly.

	2014	2015	2016
Diagnostic (Bilan d'orientation)	61%	49%	46%
Bilan pré-therapeutique	70%	73%	63%
Bilan de suivi	73%	63%	57%
Test VIH	40%	29%	26%
Admission fees between FCFA 1000-5000 (ouverture de dossier)	55%	44%	48%
Consultation	17%	21%	26%

Table 11: Percentage of facilities charging more than the official prices

Source: TAW rapports annuels 2016, 2015, 2016

Recent Information on the actual cost of HIV/AIDS services came from a 2018 survey of HIV/AIDS health clinics in Centre and Littoral Regions carried out by Cameroon Baptist Convention Health Services. For nearly all services, health facilities applied additional user fees that often resulted in more than doubling the total cost. It was only in the case of HIV testing that nearly all health facilities (95%) were found to apply the recommended Minister of Health fees.

Table 12: Cost of HIV/AIDS services in Centre and Littoral Regions

	HIV consultation fees	HIV testing	Viral load	Opening account for ART	ART refill
Recommended MOH fees	CFAF 600-1,000	CFAF 500	CFAF 5,000	Free	Free
% of health facilities applying additional fees	25% charge fee of CFAF 1,500 to 5,000; and 5% charge CFAF 5,000	5% charge CFAF 1,000 to 10,000	60% charge cost of CFAF 6,000 to 55,000	70% charge CFAF 100-5,000	25% charge CFAF 200- 300

Source: PowerPoint Presentation Addressing HIV user fees in Cameroon. Douala Workshop 2019. CBC Health Services

⁹ Treatment Action Watch (TAW) surveyed 76 "centres de prise en charge" representing 66% of all centres in all the regions of the country.

Elimination of user fees for malaria and HIV/AIDS: pitfalls and challenges

Removing financial barriers to healthcare access is a challenge in any country. In Cameroon, it is more complicated due to the role that user fees play in funding health services, which means that the removal of user fees has to be combined with other mechanisms to compensate health facilities for the loss of income. Failure to do so is likely to result in adverse effects which may negate the intended effects of the policy change. An example was Cameroon's decision to remove fees for under-fives simple malaria treatment.

Elimination of official user fees for under-fives simple malaria treatment. In Cameroon, malaria remains the leading cause of morbidity in under-fives and the leading cause of death in that group. Previous studies had documented that three-quarters of sick people did not consult a health provider, and financial cost was the reason given by more than half of the patients (Commeyras, et al. 2006). It is in this context that the government decided in 2011 that consultation and treatment kits for malaria would be provided free of charge to children under five.

Analysis of the results showed that there was an increase of about 10% in treatment for underfives in the year following the exemption, but it was not sustained over time, indicating that the increase was undistinguishable from the announcement effect (Sieleunou, et al. 2015). A key reason is that patients who expected to find free services were in fact confronted with informal fees. Two-thirds of the under-fives who used health services paid on average CFAF 2,940 compared to official prices of CFAF 325 before the elimination of fees.

Elimination of fees for HIV/AIDS. Currently, over 530,000 persons live with HIV in Cameroon, and HIV/AIDS is the second highest disease burden measured in terms of DALYs (Figure 1). As was the case for malaria, it thus made sense to reduce the remaining financial barriers that prevented access to prevention and treatment. While antiretroviral treatment had been provided free of charge, fees were incurred for several health services such as medical consultations, HIV/AIDS related tests, biological exams as well as for the treatment of opportunistic infections. Following the decision taken by the Ministry of Health on April 19, 2019, nearly all services and medicines related to HIV/AIDS are to be provided free of charge in public health facilities and community-based health centres with an implementation date of January 2020 (Box 1).

Box 1: User fees to be eliminated in public health facilities and community-based health centers (Ministerial decision of April 2019)

- HIV testing for everyone (2 tests)
- Consultations for PLWH: every three months (4 visits)
- ANC consultation (pregnant women): 4 visits
- Biological exams: 2 viral load testing per patient and one CD4 count for new patient
- HIV testing for children
- Antiretroviral drugs and drugs for opportunistic infections
- All supplies and medicines

Source: Ministry of Health and Centre National de Lutte contre le SIDA

Budgetary needs. As shown by the mentioned example of malaria, the elimination of official user fees is unlikely to reduce the cost borne by patients unless the government actually transfers additional resources to health facilities. Preliminary estimates suggest that the elimination of official user fees would cost CFAF 4.8 billion in 2020, reaching CFAF 6.5 billion in 2022 (Table 13). These costs are not small as they amount to 2.7% of the 2018 domestic health budget,¹⁰ but this reflects mainly the small size of the health budget (Figure 3).

In the case of HIV/AIDS and the prenatal care services covered by the government decision, the loss of user fees could be offset by an increase in taxes. The easiest might be to increase the rate of the value-added tax (VAT) rather than relying on the problematic introduction of new taxes. Current projections indicate that taxes on goods and services would yield FCAF 1,878 billion in 2020 (IMF 2019), which suggests that the elimination of official user fees could be funded by increasing the VAT rate by only 0.3 percentage points.

Table 13: Estimated cost of the elimination of official fees for HIV/AIDS in public health facilities and community-based health centres (FCAF million)

	Unit cost	<u>Total c</u>	<u>Total cost (FCAF millio</u>	
	(FCAF)	<u>2020</u>	<u>2021</u>	<u>2022</u>
Consultations				
Antenatal care (4 visits for all women)	600	86	83	81
Follow-up for PLWH including for ARV (4 visits)	1,000	1,432	1,692	1,898
Biological exams				
HIV tests (excluding pregnant women) (2 tests)	500	1,699	1,699	1,699
Viral load new HIV cases(2 tests)	5,000	688	983	1,294
Viral load (previous HIV cases) (1 test)	5,000	766	1,095	1,190
CD4 (only for new patients)	2.500	172	246	324
Total (FCAF million)		4,843	5,798	6,486

Source: Atelier de réflexion sur les modalités d'implémentation de la décision N° 0498. Centre National de Lutte contre le Sida. Juin 2019

The actual cost of eliminating official user fees is likely to be much higher. They are two reasons: first, there official user fees vary substantially for the same intervention even across similar health facilities. Second, official user fees can often be a small fraction of the total cost of health services due to the imposition of non-official user fees by most health facilities. In practice, this means that the elimination of official user fees is not going to eliminate all user fees for HIV/AIDS imposed by public health facilities.

Diversity and range of official fees. To understand the diversity and range of official user fees, it is useful to consider the pyramidal structure of Cameroon's health system consisting of three levels (central, intermediate and peripheral). The central level is overseen by the Ministry of Health and other national health-sector agencies. The intermediate level, consisting of regional hospitals, is administered by regional delegations while the peripheral level includes district hospitals, health centres (Centres Médicaux d'approvisionnement), integrated health centres

¹⁰ In 2018 the budgetary allocation to the Ministry of Health (i.e. excluding foreign assistance) amounted to FCAF 176 billion. As a percentage of that, the elimination of fees would represent 2.7% of the Ministry of Health budget.

(Centre de Santé), integrated health centres (Centres de santé intégrés) and ambulatory health centres. In 2016, there were 2,675 health facilities in the public sector with fees managed differently depending on the classification of the facility. As shown by a 2016 study, there was a great diversity in the way fees were set (Table 14) (Ba 2016):

- Hospitals of the first category are financially autonomous and accordingly they are responsible for setting their fees (subject to approval by the Minister of Health.
- Hospitals of the 2nd category depend administratively from the Minister of Health, and their fees are fixed by the Minister of Health, but there is no stipulated rule for updating them.
- In the case of the hospitals of the 3rd, 4th and 5th category, the rates are fixed by the Minister of Health, but in practice the rates are often fixed by the management committee of the health facility. Among the 27 district hospitals (category 4) that were surveyed, only one had a codified list of fees. None was found among the 26 hospitals of 5th category ("Centres Médicaux d'Arrondissement).
- Hospitals of 6th category are the first step in the health pyramid. They provide nurse-level services. Fees are fixed by the Minister of Health or the Health Committee.

Hospital category and numbers	Visit general practitioner	Rapid HIV test	Confirmation HIV	Pregnancy test
Hospital 1 st category (3)				
Average	3,333	830	12,630	9,253
Range	(1,500-5000)	(500-1,000)	(8480-15000)	(3,360-14,400)
Hospital 2 nd category (2)				
Average	1,150	4,125	11,500	3000
Range	(700-1,600)	(1,600-6,650)	(5,500-17,500)	(3,000-3,000)
Hospital 3 rd category (regional hospitals) (13)				
Average	808	577	5,546	2,075
Range	(600-2,000)	(500-1,500)	(1,500-9,100)	(1,000-4,000)
Hospital 4 th category (district hospitals) (27)				
Rural areas				
Average	600	588	2,583	1,706
Range	(600-600)	(500-2,000)	(1,000-5,000)	(500-2,000)
Urban areas	670	550	4,833	2,280
Average	(600-1,000)	(500-1,000)	(3,000-7,500)	(1,000-4,800)
Range	. , ,	. , ,	.,,,,,	. , , ,
Hospitals 5 th category Centre Medical	750	750	n.a.	1540
d' Arrondissement) (26)				
Hospitals 6 th category (Centre de Santé Intégré) (25)	n.a.	n.a.	n.a.	1220

Table 14: Average and range of official fees (CFAF) for HIV and antenatal care in public health facilities

Source: Analyse de recouvrement des coûts pratiqués dans les formations sanitaires et leur adéquation au système de CSU au Cameroun. Dr. Ba, 2016

Consultation and HIV tests. Looking at Table 14 reveals considerable variation in the level of official user fees, even for hospitals of the same category. This especially the case for biological tests and ANC services, where the variation is the greatest. In contrast, the range of fees for

consultation and HIV testing is narrower. The Minister of Health recommends a range of CFAF 600-1,000 for consultation, and this is indeed found in the hospitals of 3rd, 4th and 5th category. For HIV testing, the recommended fee is CFAF 500, and while there are some exceptions, the average user fee is close to that level. This suggests that the elimination of official user fees should start first with consultation and HIV testing as these two components of HIV/AIIDS services have official user fees that seem to be generally respected by health facilities.

Range of Unofficial user fees. Eliminating user fees for other HIV/AIDS services is likely to be more complicated. Cost recovery at the facility level is done by charging patients a fee that is a function of the health service that is delivered. If the official user fee for that service is low, the reimbursement being input-based gives strong incentives to health practitioners to increase the number of tests as a way to boost their revenues. Such a practice can be seen in the case of antiretroviral treatment.

Although the Ministry of Health recommends test and treat with no pre-therapeutic tests, many facilities still request pre-therapeutic tests (ASAT, ALT HPV, CDA, TB, etc.) on the ground that these tests help align treatment with the patient's biological status. Furthermore, once patients begin their treatment, they face administrative fees for opening an ART file and they must pay refilling fees for ART once on treatment (Table 15). The end-result is to increase substantially the cost of HIV/AIDS services beyond the intended level of official fees.

	MOH recommended fees (FCAF)	% of facilities charging additional fees
Consultation	600-1,000	25% charge 1,500-5, 000
HIV testing	500	5% charge 1,000-10,000
Viral load test	5,000	60% charge 6,000-55,000
Biological test for Test and Treat	No pre-therapeutic workup tests	50 % requests tests (ASAT, ALT, CD4, TB, etc.) at cost of 15,000-150,000
Fee for opening ART file	Free	70% charge 100, 5,000
Fee for ART refill	Free	25% charge 200-3,000

Table 15: Cost of other fees for HIV/AIDS treatment

Source: PowerPoint presentation CBC Health Services. Douala workshop. Dr Ba. 2019

Total cost of official and unofficial user fees. In total, the charging of various additional user fees ends-up increasing the cost of HIV/AIDS services by a substantial amount. Information on the actual cost of a package of services consisting of consultation, HIV test and viral load was collected by the survey of health facilities in the Centre and Littoral region (CBC Health Services 2019). In Yaoundé, the official user fees for the package of services amounted to CFAF 11,000 and additional user fees increased cost by an amount ranging from 5% to a factor of 20 when reaching the highest level of health services (Figure 6). In Douala, the official cost of the package of services was CFAF 8,000 but the additional informal fees increased that cost from 60% to a factor of 20) (Figure 7). These costs were incurred before the implementation of a Voucher Initiative for HIV/AIDS services, which resulted in eliminating most informal user fees (see section on vouchers).

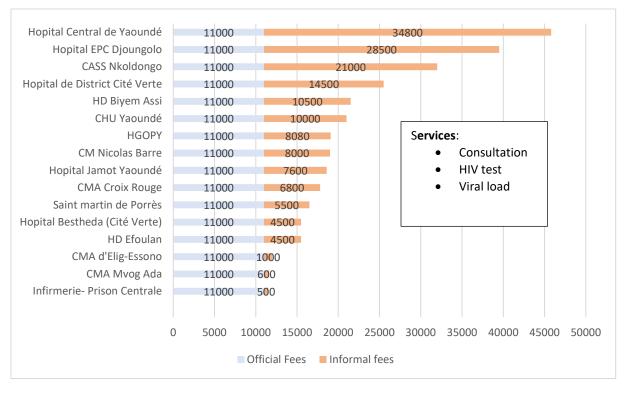
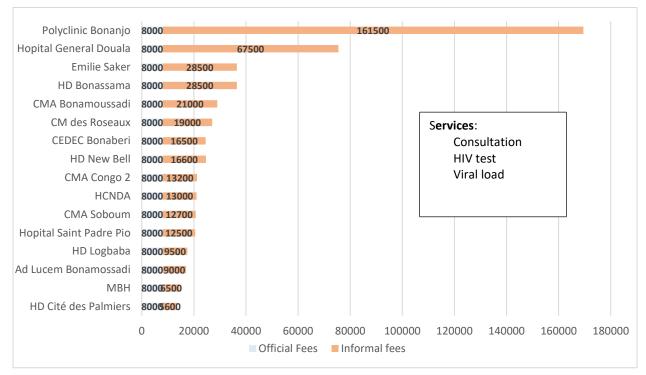


Figure 6: Fees for HIV services in health facilities in Yaoundé before Voucher Initiative

Figure 7: Fees for HIV services in health facilities in Douala before Voucher Initiative



Source: PowerPoint presentation: Addressing HIV user fees in Cameroon. CBC Health Services. Douala workshop. Dr Ba. 201

These results show that the elimination of official user fees alone is insufficient for ensuring that HIV/AIDS services are provided free of charge as intended by the April 2019 decision of the Ministry of Finance. Achieving that objective will require: (i) updating official user fees to reflect actual costs; (ii) harmonizing them across facilities of the same category; (iii) transferring resources to health facilities and (iv) having in place an effective system for monitoring results. An important step toward that goal is to address governance issues.

Governance issues. Various shortcomings in the financial management of health facilities affect the likelihood that health facilities can be compensated for the loss of revenues in a timely manner. Reimbursement of costs is especially problematic for the peripheral health facilities as nearly 98% of the health facilities ("Formation Sanitaire") of category 3 to 6 do not have a computer-based financial management) (Ba 2016). In such a system, it is difficult to provide an effective and timely system for reimbursing health facilities and monitoring the interventions that are delivered.

These shortcomings indicate a need to develop a much stronger chain of results from health inputs to health outcomes. On one hand, investments in the "supply-side" of health services will be necessary to address the lack of infrastructure and health personnel, but to be effective these investments have to be combined with interventions on the "demand-side" to stimulate demand for health services. Most important, priority will have to be given to improving the quality of services. Without it, it is unlikely that the needed mobilization of resources for health will receive much support from Cameroon's population.

The need to change the way health systems are funded and operate has led to the implementation of several initiatives In Cameroon with the most important ones being: (i) Performance-Based Funding, and (ii) Maternal Health Vouchers ("Chêque Santé").

Performance-Based Funding

The first Performance-Based Financing (PBF) was launched in 2004 in the East region of Cameroon. It was followed by an expanded programme in 2011 that was aimed at providing key maternal and child health services in 26 health districts in the Littoral, North-West, South-West and East regions. The programme has now been scaled up with the goal of having a national coverage (IDA 2016). At the end of 2018, 78% of the population was covered by PBF in ten regions.

Compared to traditional health systems, PBF disburses funds differently. Instead of allocating financial resources through the Ministry of Health, PBF disburses resources directly to health facilities based on the results that have been achieved. It thus:

- Shifts the dialogue between government and donors from a focus on the execution of budgets to discussing results.
- Provides incentives for results. Health facilities that are part of the PBF earn monthly financial payments based on achieving specified service utilization and quality-of-care results. These subsidies are paid directly into the health facilities' bank accounts after verification of results.

- Strengthens the focus on measurements. Due to its link between performance and payments, RBF creates a strong demand for health information systems to provide timely information and allow verification.
- Avoid crowding out of non-public health facilities. Cameroon's PBF includes public, faithbased, non-profit and profit-based facilities.

As currently designed, the PBF mainly provides funding for improving health services to pregnant women and children, but it could offer an attractive entry point for stimulating the access to HIV/AIDS services. The PBF already includes a component for HIV/AIDS services for pregnant women that covers prevention of mother-to-child services (PMTCT), Voluntary Counselling and neonatal treatment for AIDS. Extension of the PBF could thus cover the free provision of HIV testing and all related HIV/AIDS services to pregnant women and children. And most likely, this could be extended to cover HIV testing for the whole population.

Using the PBF mechanism for compensating health facilities for the loss of revenues due to the elimination of official user fees could be done as follows:

- First, the government would increase its transfers. Recently, the government has started to increase its financial contribution to the PBF by transforming budgetary allocations to health facilities into PBF funding in seven regions, which suggests that these allocations could be increased to cover the loss in revenues from the elimination of user fees.
- Second, once received by the regions, the funds are transferred directly to the bank accounts of the intended beneficiaries. A key feature of Cameroon's PBF is that the transfer of funds is done through the banking sector, which ensures that the funds will actually reach the intended health facilities. As each provider is obligated to have an independent bank account, direct payments to providers is possible.
- Third, the verification of results is done by Contracting and Verification Agencies that are set up in the 12 regions of the PBF. Upon verification, CDVAs send payment requests to the National PBF Technical unit, which in turn makes direct payments to health centres.
- Fourth, the PBF includes exemption mechanisms for the poor to cover health care provided at the community and health facility levels. These mechanisms could thus be used to fund the elimination of user fees in these communities.

As it stands, the PBF is mainly focused on improving the supply side of health services. The rationale is that the improved quality in services would be sufficient for enticing people to seek health care in the contracted facilities. A complementary way would be to act directly on the demand side by providing vouchers. Currently, two voucher programmes are being implemented. One is maternal health voucher ("Chêque Santé") and the other one is a voucher program to increase access to HIV/AIDS services.

Improving access to health services by providing vouchers

"Chêque Santé". The project was launched in 2014 by the government with support from the French Development Agency and the Development Bank of Germany (KFW) and implemented by CIDR/CARE in three pilot regions (North, Extreme North and Adamaoua). Participating

institutions are health facilities (*Centres de Santé Intégrés* et *Centres Médicaux d'Arrondissement*) as well as district and Regional hospitals.

The maternal health voucher programme ("Chêque Santé") is a demand-side financing intervention that aims to stimulate the demand for specific health services by offering for sale vouchers that can be redeemed in accredited health institutions. Vouchers are thus offered for purchase at a price of CFAF 6,000 and in exchange, beneficiaries can purchase a package of health services from pregnancy to delivery, including the new-borns for 42 days. Initially the package was estimated to cost CFAF 60,000 with the difference between cost and voucher price being covered by subsidies from the project funders. In practice, the evaluation study found that the average cost was much lower (CFAF 30,400 per pregnant woman and per year in 2016).¹¹ Analysis of results found that the quality of health services improved as well as the motivation of staff due to the financial incentives that health facilities received (ICI Santé 2018).

The initiative was well received as shown by the qualitative survey done in 2017 (Kouanda, et al. 2017). In total, the percentage of birth deliveries in accredited health facility rose from 10% in 2015 to 64% by mid-2018 (CIDR 2018). An important effect of the voucher was to provide health facilities with more resources, which led to improved quality of health services and better health outcomes in terms of maternal and neonatal mortality (Table 14).

	Vouchers	No vouchers
Number of deliveries per year Number of deaths per 1,000 in health facilities	170,331	107,161
Pregnant women	0.581	1.781 *
Neonatal	2.219	6.084 *

Table 16: Impact of voucher ("Chêque Santé") on maternal and neonatal deaths per year

Source: CIDR 2018

Note: * = statistically significant with p < 0.0001

Looking at the future, there is a strong complementarity between the PBF and the "*Chêque Santé*" as the PBF can be used to provide more resources to health facility and monitor results while the "*Chêque Santé*" can serve to address financial constraints and boost demand. This complementary can be seen from the impact evaluation of the PBF, which revealed that the PBF had not increased the number of birth deliveries and ANC visits, a result that was attributed to existing user fees acted as a barrier on the demand-side. These remaining barriers could be addressed by the "*Chêque Santé*.

Voucher initiative for HIV/AIDS. To address demand-side financial barriers to HIV, another voucher initiative was launched by PEPFAR in 2018. In this case, vouchers were made available in specific scale-up clusters as resources were not sufficient to fund voucher implementation on a large scale. Vouchers for clinical consultations were offered on a limited basis to vulnerable

¹¹ This cost includes the cost of medical services as well as other administrative costs.

and priority groups. Viral load testing vouchers was offered to children, adults, pregnant women and key population with identified needs. And a limited number of ANC packages were provided to women who have not attended ANC for financial reasons. Implementation of the initiative relied on implementation partners (IP) which would help identify people with financial barriers.

A key feature of the system is that voucher reimbursements are based on approved and published government rate for services. This meant that the level of official fees had to be normalized and standardized across health facilities involved in the voucher scheme and facilities would be reimbursed based on the level of the agreed official user fees. This effort succeeded in drastically reducing the role of informal user fees. Viral load tests and testing were all offered based on the payment of official fees only. It was only in the case of ANC that the impact was much more limited.

Preliminary results for the period Jan 2018 to mid-2019 reveal a substantial increase in the number of persons accessing viral load testing (number increased from 40,077 in 2018 to 61,182 during the first six months of 2019) (Ba 2019), but it important to keep in mind that this is not a randomized controlled trial but a comparison that is focused on a targeted group.

Conclusions

Currently, Cameroon's health system does not generate sufficient value for its money. The most important step forward would be to improve governance. As Cameroon's per capita income grows over the long-term, the country's capacity to fund higher health expenditures would increase. But the experience of those countries that have managed to fund Universal Health Coverage shows that they have benefitted not only from more health resources, but also from a stronger governance. While more resources offer the possibility of improving the quantity and quality of resources, the improvement in governance enables the public health sector to deliver more and better services.

Current projections of Universal Health Coverage show that the attainment of UHC would only be feasible if the country somehow were to be able to fund the substantial funding gaps that the attainment of UHC involves. To implement that long-term objective, a gradual expansion of universal health care, focusing first on high priority interventions, would seem the best way forward.

In this context, the decision taken by the Ministry of Health to proceed with the elimination of fees by January 2020 constitutes an important step. However, to be successful it has to be accompanied by an effective transfer of revenues to health facilities which may require the following preparatory steps:

First, the elimination of fees could proceed in steps. The easiest fees to eliminate are the consultation and HIV test as the observed range of official fees is less than for other HIV/AIDS services and official user fees are applied in the great majority of cases. In total, the elimination of user fees for these two services would cost about CFAF 3.1 billion in 2020 rising to CFAF 3.6 billion by 2022. The cost could be covered by increasing the value-added tax by 0.3 percentage points.

- Second, there is a need to standardize and harmonize official fees as a prerequisite for calculating the loss of revenues of health facilities and the needed compensating transfer of revenues from the Ministry of Health. As shown by a survey of official user fees, the fees for the same service differ substantially across hospitals of the same category.
- Third, there is a need to increase official user fees and to use these new fees as a basis for calculating the funds to be received by health facilities. These fees do not cover the operating costs of hospitals, forcing them to charge additional informal fees. As shown by a survey of health facilities in the Centre and Littoral Regions, a standard package of HIV services consisting of consultations, HIV test and viral load was found to cost on average 50% to 100% more than suggested by official fees. In some cases, the total cost was 20 times the cost calculated using official fees. However, more information needs to be collected to calculate more accurately the likely cost of the provision of HIV services free of charge.
- Fourth, a new management system needs to be put in place to shift from an input-based system to a performance-based system. To carry out this transition, the government may want to take advantage of the existing PBF, which already allow government funds to be transferred directly to the banking accounts of health facilities. This system could thus be used for compensating health facilities for the loss of funds.
- Fifth, in addition, the PBF could benefit from two initiatives aimed at directly addressing demand-side constraints: the "Chêque Santé" and the Voucher Initiative for HIV. There is a natural complementarity between these various initiatives.

Country	Study	Impac	t on access
Benin	Soucat et al (1997)	Positive	
Burkina Faso	Ridde (2003)		Negative
Burundi	Bate and Witter (2003)		Negative
Cambodia	Akashi et al (2004) Barber et al (2004) Jacobs and Price (2004)	Positive Positive	Negative
Cameroon	Litvack et al (1993)	Positive	
China	Liu and Mills (2002)		Negative
Democratic Republic of Congo	Haddad and Fournier (1995)		Negative
Ethiopia	Russell and Abdella (2002)		Negative
Ghana	Nyonator and Kutzin (1999)		Negative
Guinea	Soucat et al (1997)	Positive	
Kenya	Collins et al (1996) Mbugua et al (1995)		Negative (Neutral) Negative
Mali	Mariko (2003)	Positive (Neutral)	
Mauritania	Audibert and Mathonnat (2000)	Positive	
Niger	Chawla and Ellis (2000) Diop et al (1995) Meuwissen (2002)	Positive (Neutral) Positive	Negative
Nigeria	Uzochukwu et al (2004)	Mixed	itegative
Sierra Leone	Fabricant et al (1999)		Negative
Tanzania	Hussein and Mujinja (1997) Laterveer et al (2004)		Negative Negative
Uganda	Kipp et al (2001)		Negative
Zambia	Blas and Limbambala (2001)	Mixed	
Zimbabwe	Zigora et al (1996)		Negative
Total		9 positive; 2 mixed	15 negative

Table A1: User fees and their impact on access, 1995-2005

Source: James, 2006.

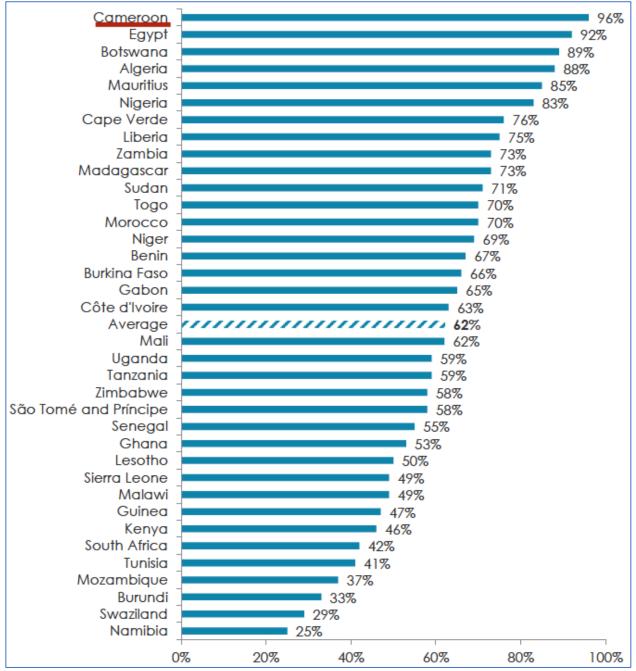


Figure A1: Presence of health clinics in surveyed areas in 2014/2015

Source: Afrobarometer 2016.

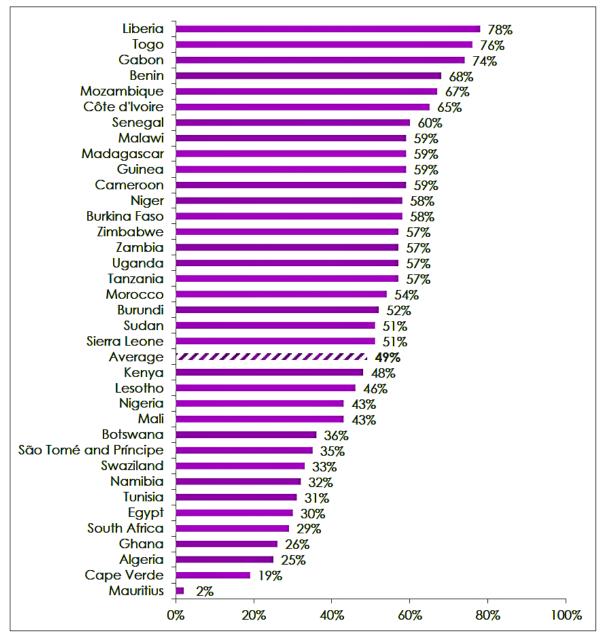


Figure A2: Percentage of households interviewed going without medicine or medical care 2014-2015

Respondents were asked: Over the past year, how often, if ever, have you or anyone in your family gone without medicines or medical treatment? (% who say "once or twice," "several times," "many times," or "always")

Source: Afrobarometer survey 2016.

Bibliography

- Armah-Attoh, D., Selormey E. and Houessou R. 2016. *Despite gains, barriers keep health care high on Africa's priority list.* Afrobarometer.
- Ba, H. 2016. Analyse de recouvrement des coûts pratiqués dans les formations sanitaires et leur adéquation au système de CSU au Cameroun. International Labour Office.
- Binyaruka, P., Patouillard, E., Powell-Jackson, T., Greco, G., Maestad, O., Borghi J. 2015. "Effect of paying for performance on utilisation, quality, and user costs of health services in Tanzania: A controlled before and after study." *PLoS ONE 10(8): e0135013. doi:10.1371/journal.pone.0135013.*
- Bonfrer, I., Soeters, R. et al. 2014. "Introduction of Performance-Based Financing In Burundi was associated with improvements In care and quality." *Health Affairs 33, No. 12 (2014): 2179–2187.*
- Boyer, S., Eboko, F., et al. 2010. "Scaling up access to antiretroviral treatment for HIV infection: the impact of decentralization of healthcare delivery in Cameroon." *AIDS*, 24 (suppl 1): S5-S15.
- Boyer, S, Marcellin,F, et al. 2009. "Financial barriers in Yaoundé, Cameroon: first results of a national cross-sectional survey." *Bull World Health Organ* 87:279-287.
- Burnham, G., Pariyo, G., Galiwango, E., Wabwire-Mangen, F. 2004. "Discontinuation of costsharing in Uganda." *Bulletin World Health Organization* Vol. 82, Issue 3:187–95.
- CBC Health services. 2019. "Addressing HIV user fees in Cameroon : Implementation of Voucher Initiative in Center and Littoral Regions in COP 18: Results obtained and lessons Learned." PowerPoint presentation. Dr. Ba. Douala workshop.
- CIDR. 2018. *CSU et Chèque Santé (CS).* PowerPoint presentation, Centre International de Développement et de Recherche.
- Collins, D., Quick, J., Musau, S., Kraushaar, D., Hussein, I. 1996. "The fall and rise of cost-sharing in Kenya: the impact of phased implementation." *Health Policy and Planning* 11(1):52–63.
- Commeyras, C., Ndo, J.R, Merabet, O., Kone, H., and F.P. Rakotondrabe. 2006. *Comportement de recours aux soins et aux médicaments au Caméroun.* Cahiers Santé, vol. 16 No 1.
- Cotlear, D., and N. Rosemberg. 2018. *Going universal in Africa: How 46 African countries reformed user fees and implemented health care priorities.* Universal Health Coverage Study Series No. 26. World Bank.
- Eboko, F., Abé, C., Laurent, C. 2010. *Accès décentralisé au traitement du VIH/sida : évaluation de l'expérience camerounaise*. Anrs Collection Sciences sociales et sida.
- Goldman, D.P, Joyce, G.F, Zheng Y. 2007. "Prescription drug cost sharing: associations with medication and medical utilization and spending and health." *JAMA*, July 04: 61-69.

- ICI Santé. 2018. "Evaluation à mi-parcours du projet "lancement et gestion du système Chêque Santé au Cameroun."
- IDA. 2016. *Health System Performance Reinforcement Project.* Project Appraisal Document, World Bank.
- IMF. 2019. "Fourth review under the extended credit facility arrangement." June 17.
- James, C., Hanson K., McPake, B. et al. 2006. "To retain or remove user fees? Reflections on the current debate in low- and middle-income country." *Applied Health Economics and Health Policy %: 137-53.* http://www.ungei.org/SFAIdocs/resources/To_Remove_or_Retain_User_Fees.pdf.
- Kouanda, S., Vagai, Y.M, Simeon, N., Galland, B., and Bassirou, B. 2017. Enquête sur Satisfaction des bénéficiaires du Projet Chêque Santé dans les régions de l'Adamaoua, Nord et Extrême-Nord du Cameroun. CIDR.
- Lagarde, M., Palmer, N. 2011. "The impact of user fees in low- and middle-income countries." *Cochane Database of Systematic Reviews, Issue 4.*
- Litvack, J., and C. Bodart. 1993. "User fees and improved quality of care equals improved access: Results of a field experiment in Cameroon." *Soc. Sc. And Med.*, 37 (3): 369-383.
- McIntyre, D., and F. Meheus. 2014. *Fiscal space for domestic funding and other social services.* London: Chatham House.
- Ministère de la Santé Publique. 2016. "Analyse situationnelle du financement de la santé au Cameroun. Stratégie de financement de la santé 2017-2021."
- MInistère de la Santé Publique. 2018. "Evaluation des contributions mobilisables par source de financement de la santé au Cameroun."
- Ministère de la Santé Publique. 2017. "Instauration de la couverture santé universelle au Cameroon; Synthèse des travaux du Groupe Technique National."
- Ministère de la Santé Publique. 2016. "Plan National de Développement Sanitaire PNDS 2016-2020."
- Ministère de la Santé Publique. 2016. "Stratégie sectorielle de santé 2016-2027."
- Qin, V.M, Hone, T., Millet, C., et al. 2019. "The impact of user charges on health outcomes in lowincome and middle-income countries: a systematic review." *BMJ Glob Health*, 3:e 001087.
- Sieleunou, I., Betsi, E., Kouontchou, J.C, Nguela, T.A and H.A. Yumo. 2015. "Removing the User fees for the under-fives' simple malaria treatment in Cameroon: Effect on the health services utilization." *J Community Med Health Educ*, vol 5 Issue 6.
- Singh, A. 2003. *Building on the user-fee experience*. Geneva: Discussion Paper Number 3. World Health Organization.

Treatment Action Watch. 2016. "Etat de l'accès aux soins des PVVIH au Cameroon."

UNAIDS. 2019. "AIDSinfo." aidsinfo.unaids.org.

UNAIDS. 2018. *Miles to Go: closing gaps, breaking barriers, righting injustices*. Geneva: UNAIDS.

UNAIDS. 2018. "UNAIDS DATA 2018 Reference."

- United Nations. 2015. *Transforming our world: the 2030 agenda for sustainable development.* New York: United Nations.
- Watson, S.I, Wroe, E.B., et al. 2016. "The impact of user fees on health services utilization and infectious disease diagnoses in Neno District, Malawi: a longitudinal quasi-experimental study." *BMC Health Services Research 2016 16:595.*
- WHO Task force on Innovative International Financing for Health Systems. 2010. *Constraints to Scaling Up the Health Millennium Development Goals: Costing and Financial Gap Analysis.* WHO.
- WHO. 2010. "The world health report: health systems financing: the path to universal coverage."

-. 2015. "World Health Statistics 2015."

- Wilkinson, D., Gouws, E., Sach, M., Karim, S. 2001. "Effect of removing user fees on attendance for curative and preventive primary health care services in rural South Africa." *Bulletin of the World Health Organization* Vol. 79, issue 7:665–71.
- World Bank. 2017. Cameroon Performance-Based Financing Impact Evaluation Report. World Bank.
- World Bank. 2018. 2018 Cameroon Public Expenditure Review Aligning public expenditure with the goals of vision 2035. World Bank.
- -. 2019. "Databank." https://data.worldbank.org/indicator/SH.UHC.OOPC.10.ZS.
- World Bank. 1987. *Financing health services in developing countries: An agenda for reform.* World Bank Policy Study, Washington D.C.: World Bank.