USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

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Policy Brief: Pharmaceutical Expenditure Tracking in Burkina Faso (2018 Data)

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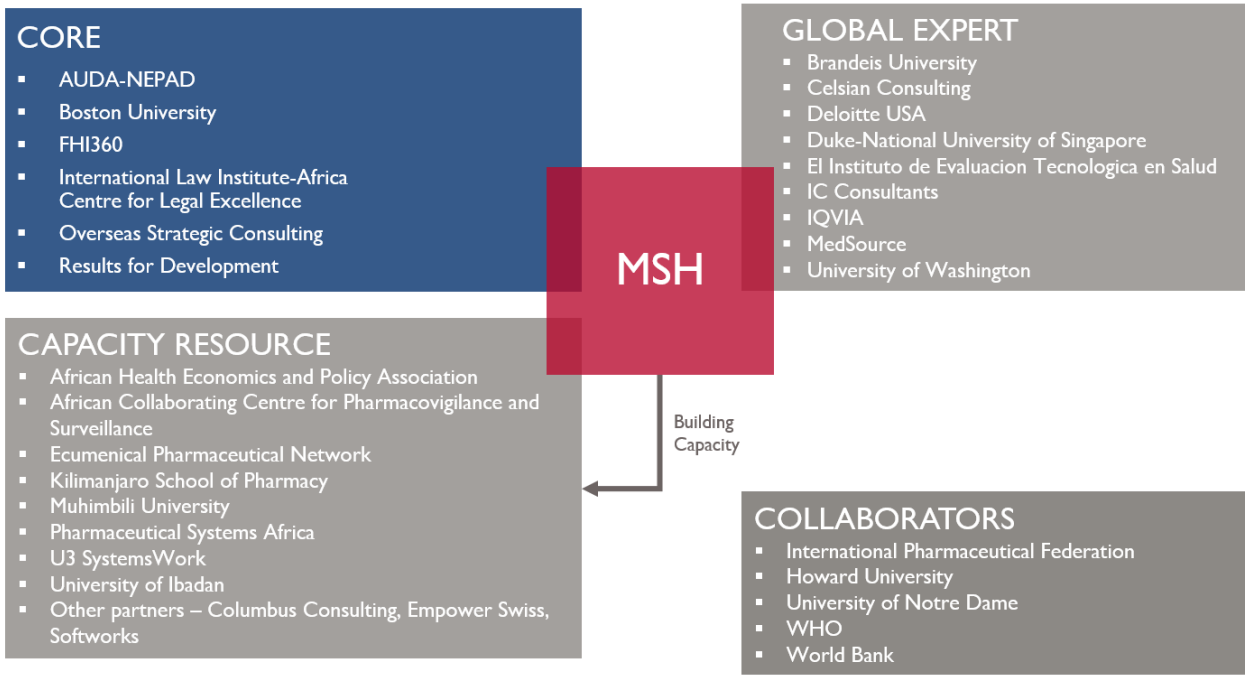
About the USAID MTaPS Program

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to higher-performing health systems. MTaPS focuses on improving access to essential medical products and related services and on the appropriate use of medicines to ensure better health outcomes for all populations. The program brings expertise honed over decades of seminal pharmaceutical systems experience across more than 40 countries. The MTaPS approach builds sustainable gains in countries by including all actors in health care—government, civil society, the private sector, and academia. The program is implemented by a consortium of global and local partners and led by Management Sciences for Health (MSH), a global health nonprofit.

The MTaPS Consortium



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ACRONYMS AND ABBREVIATIONS

ARV	antiretroviral
CAMEG	Centrale d'Achat des Médicaments Essentiels Génériques et des Consommables Médicaux [National Supply Center for Essential Generic Drugs]
DALY	disability-adjusted life year
GDP	gross domestic product
LMICs	low- and middle-income countries
MTaPS	Medicines, Technologies, and Pharmaceutical Services
OOP	out of pocket
SHA	System for Health Accounts
THE	total health expenditure
TPE	total pharmaceutical expenditure
UNICEF	United Nations International Children's Emergency Fund
USAID	US Agency for International Development
WHO	World Health Organization

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PROJECT SUMMARY

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Activity Start Date And End Date:		September 20, 2018–September 19, 2023
Name of Prime Implementing Partner:		Management Sciences for Health
Contract Number:		7200AA18C00074
MTaPS Partners	**Core Partners**	Boston University, FHI 360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, NEPAD
	Global Expert Partners	Brandeis University, Deloitte USA, Duke-National University of Singapore, El Instituto de Evaluacion Technologica en Salud, IC Consultants, Imperial Health Sciences, MedSource, QuintilesIMS, University of Washington
	Capacity Resource Partners	African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, University of Ghana's World Health Organizations (WHO) Pharmacovigilance Collaborating Center, Kilimanjaro School of Pharmacy, Muhimbili University, Pharmaceutical Systems Africa
	Collaborators	International Pharmaceutical Federation, Howard University, University of Notre Dame, WHO, World Bank

1. EXECUTIVE SUMMARY

Besides human resource costs, pharmaceuticals and other medical product costs are characteristically one of the principal expenditure items in many health system budgets. Consequently, understanding the supply and demand causes of pharmaceutical spending within health systems is vital. To enhance appropriate use of limited resources, policymakers need to know where resources for pharmaceuticals come from; how much is spent within a given period; what type of pharmaceuticals and medical products are purchased; and who benefits from the purchases. Pharmaceutical expenditure tracking highlights resource allocation and improves equity-related decision-making. Adopting a more robust top-down and bottom-up data collection approach for pharmaceutical and medical products other than use of surveys allows for an increased accuracy in pharmaceutical expenditure tracking.

Using this methodology, the Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program and the Local Health System Sustainability Project found that the total pharmaceutical expenditure (TPE) for Burkina Faso in 2018 was more than twice as much as previously estimated for that year: USD 350 million instead of USD 147 million. The 2018 data for Burkina Faso also revealed that 80% of TPE was spent on 6% (113 out of 1937) pharmaceuticals procured and consumed in the year. By contrast, 15% of TPE was spent on 18% (329/1937) of pharmaceuticals, and 5% of TPE was spent on 72% (1395/1937) of pharmaceuticals.

An important concern for countries is how the TPE is distributed geographically across districts. The current approach affords a comprehensive analysis of the geographical spread of expenditures and showed major geographic inequities in pharmaceutical spending, with poorer regions spending less per capita than more affluent areas. This information speaks to the issues of equity of resource allocation. For example, our analysis revealed that the Centre District, the Centre Nord, and Haut Bassins accounted for 40% of pharmaceutical spending in 2018 even though they represent 30% of the population. In contrast, Mouhoun, one of the poorest regions in the country, with a poverty rate of 60%, accounted for 7% of TPE despite representing 9.3% of the country's total population. Its per capita pharmaceutical spending was also lower than the national average, at FCFA 7,640. The wealthier Centre Nord region, with a lower poverty rate of 22% and 9.1% of the population, had the highest per capita medicines spending of FCFA 14,370 (twice that of Mouhoun—highlighting potential inequity in distribution in pharmaceutical resources).

The recent MTaPS work on pharmaceutical expenditure tracking in Burkina Faso provides preliminary data to support additional examination of causes of high pharmaceutical expenditure for particular therapeutic classes or disease categories in Burkina Faso. As more routine data collection becomes possible, domestic purchases from pharmacies and routine direct-to-user sales data should be included to estimate the out-of-pocket (OOP) payment for medicines. Using regulation and advocacy, efforts must be made to intensify use of electronic point-of-sales systems and electronic medical records in all public and private pharmacies, to facilitate collection and aggregation of pharmaceutical and medical product consumption and expenditure data within health systems.

2. INTRODUCTION

Along with personnel costs, pharmaceuticals and other medical products are typically one of the largest items in many countries' health budgets. Spending on medicines represents 20% to 40% of total health expenditure in low- and middle-income countries (LMICs).[1] Therefore, understanding the supply and demand determinants of pharmaceutical spending is crucial. Due to the high cost of pharmaceuticals in many LMICs, policymakers and health managers often face challenges when identifying sufficient funding to allocate to pharmaceuticals—raising questions regarding suitable per capita spending levels and the amount of pharmaceutical spending that should come from governments, insurance, or household OOP expenses. Understanding health system spending patterns on medicines will enable better decision making on resource mobilization, inter- and intra-sectoral fund allocation, resource pooling, health benefit design, and strategic purchasing of pharmaceuticals, as well as strengthen the overall financing systems for pharmaceuticals. Strengthening financing of pharmaceuticals means raising and allocating funding in an efficient, effective, strategic, and equitable manner with the aim of reducing OOP expenditure to protect individuals from financial risk when they utilize pharmaceuticals at the point of care.

The World Health Organization (WHO) highlights additional reasons why governments and policymakers need to better understand and manage resources within their pharmaceutical systems. First, pharmaceuticals account for three of the ten leading causes of health system inefficiencies. Second, 30–40% of patients in LMICs are not treated according to approved clinical treatment guidelines and with appropriate pharmaceuticals, which leads to waste of scarce resources and suboptimal health outcomes.[2] Finally, nonadherence by patients to treatment guidelines leads to unnecessary repeat treatments and further wasted resources. To optimize the use of limited resources, policymakers need to understand where resources for pharmaceuticals come from; whether those sources are sustainable (i.e., who pays for pharmaceuticals); whether pharmaceutical resource utilization is achieving maximal results (e.g., by looking at how much is spent and what the related outcomes are relative to different populations and other countries); whether resource allocation is achieving maximal results (e.g., by understanding where resources go); and what types of pharmaceuticals or pharmaceutical services are purchased and whom they benefit. Pharmaceutical expenditure tracking highlights resource allocations and aids equity decision making by policy makers for resources within a country.

The System for Health Accounts (SHA) framework has been used for more than 20 years to track health expenditures and inform health policy across the globe. In Burkina Faso, health accounts data have been used to inform policy for more than 15 years. The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program and Local Health System Sustainability Project adapted the SHA 2011 framework to conduct an exploratory pharmaceutical expenditure tracking exercise in Burkina Faso using 2018 data. This exercise was undertaken by the two projects to develop an approach for tracking pharmaceutical expenditure using

[1] World Health Organization. 2006. Rational use of medicines: progress in implementing the WHO medicines strategy. Geneva.

[2] Ten leading sources of inefficiencies in health systems (WHO World Health Report 2010, Chapter 4).

the SHA 2011 methodology and document it in a draft resource on pharmaceutical expenditure tracking. The resource complements the SHA 2011 manual and provides guidance on tracking pharmaceutical expenditures with more accuracy and detail. The approach entailed the use of more detailed data collection from national drug authorities, national importation data sources (top-down), and subnational sources (bottom-up) to obtain pharmaceutical expenditure data. The approach also disaggregated data by drug therapeutic and disease classes. This policy brief highlights the results of the exploratory exercise to track pharmaceutical expenditure in Burkina Faso and core elements of the draft pharmaceutical expenditure guide, provides responses to critical policy and health system management questions related to pharmaceutical expenditures in Burkina Faso, and makes recommendations for future pharmaceutical expenditure tracking exercises.

3. BACKGROUND AND CONTEXT

3.1. BURKINA FASO

Burkina Faso is a low-income country in West Africa with an estimated population of 20.1 million (2018), 46% of which is under age 15.[3] The population grew by 5.1% from 2016 to 2018. A high proportion (40.1%) of the country lives below the national poverty line. The income distribution is unequal but improving, with the Gini Index falling gradually from 48.1% in 1994 to 35.3% in 2014.3 The gross domestic product (GDP) per capita in Burkina Faso was USD 2,178 in 2020 when adjusted by purchasing power parity.[4] The high burden of HIV (estimated at 26% with an incidence rate of 2.6%) and TB in the country are also contributors to the high level of poverty.

District map of Burkina Faso

3.2. HEALTH SYSTEM ORGANIZATION IN BURKINA FASO

The government health system of Burkina Faso has three levels: a central level organized around the office of the Ministry of Health, an intermediate level that includes the General Secretariat and 13 health directorates, and a peripheral level consisting of health districts and operational facilities. Public health care facilities are organized within this hierarchy to provide primary, secondary, and tertiary care.

[3] Burkina Faso Demographic and Health Survey 2019.
[4] https://tradingeconomics.com/burkina-faso/gdp

Primary health centers (*Centres de Santé et de Promotion Sociale*), secondary hospitals in district capitals, and tertiary referral hospitals enable access to much-needed health services in Burkina Faso. The private health sector consists primarily of private clinics, pharmacies, and diagnostic centers concentrated in the cities of Ouagadougou and Bobo-Dioulasso. In 2018, there were more than 600 private health care facilities, and the average radius of distance between health care facilities (including private) was 4.5 km.

Quick Facts:

- Total Population: 20.1 million
- Income level: low income
- Primary source of funding: General government revenue
- Total fertility rate: 5.11 per woman
- Life expectancy: 52.2 years
- Infant mortality: 55.3 per 1,000 live birth
- Maternal mortality ratio: 320
- % of population within 5 km of a health facility: 64%
- Adult literacy rate: 41.2%
- Health spending as % of GDP: 5.63%
- Health spending per capita: USD 40
- Human development index: 144
- Source World Bank 2017–2019

3.3. PHARMACEUTICAL SYSTEM IN BURKINA FASO

As stipulated in regulation Arreté No. 2001-0250/MS/CAB of 21/11/2001, pharmaceutical distribution is the responsibility of wholesalers, pharmacies, and drugstores duly authorized by the Ministry of Health. The public system under the Ministry of Health is led by Centrale d'Achat des Médicaments Essentiels Génériques et des Consommables Médicaux (CAMEG), which is the nonprofit central procurement and distribution agency. CAMEG's 10 regional sales offices and district distribution warehouses ensure the availability of medicines within the public sector based on a cost recovery mechanism. In line with the Bamako Initiative, health facilities charge a user fee for medicines. The fee is at cost plus an agreed supply margin. Regional depots resupply health facilities only when health facilities pay for the previous supply of medicines, thereby maintaining a revolving cost recovery funding mechanism. Funding gaps occur, however, due to delays in reimbursements from the central government for beneficiaries of exemption policies such as emergency obstetric and neonatal care, free medical care for children up to the age of five and their mothers, and free care for indigent persons under the results-based financing program. CAMEG represents 48% of the total Burkina Faso market value in pharmaceutical sales.[5] It safeguards adequate levels of imports and supply to district distribution warehouses, which in turn supply the essential medicine stores of health facilities. Other players, including UNICEF, support specific health technologies, procurement, and distribution, such as vaccines.

Private health care providers, which include both for-profit and not-for-profit entities, obtain medicines through private wholesalers that supply pharmacies and private medical stores. Pricing of pharmaceuticals within private wholesalers and pharmacies is guide by a recommended price system support by legislation and monitored by government. As of 2020, there were seven authorized pharmaceutical wholesale distributors in Burkina Faso. Its two largest cities—Ouagadougou and Bobo-Dioulasso—account for 90% of private facilities.[6] Very little local pharmaceutical manufacturing takes

[5] Burkina Faso Supply Chain Assessment, 2017. Global Fund
[6] Pharmacy Practice in Developing Countries – Chp. 18 Burkina Faso Agyemang Prempeh, 2016.

place in Burkina Faso, and almost all pharmaceuticals are imported. In 2018, there were 246 pharmacies and 617 private drug depots.[7]

Figure 1 illustrates the supply chain in Burkina Faso.[8]

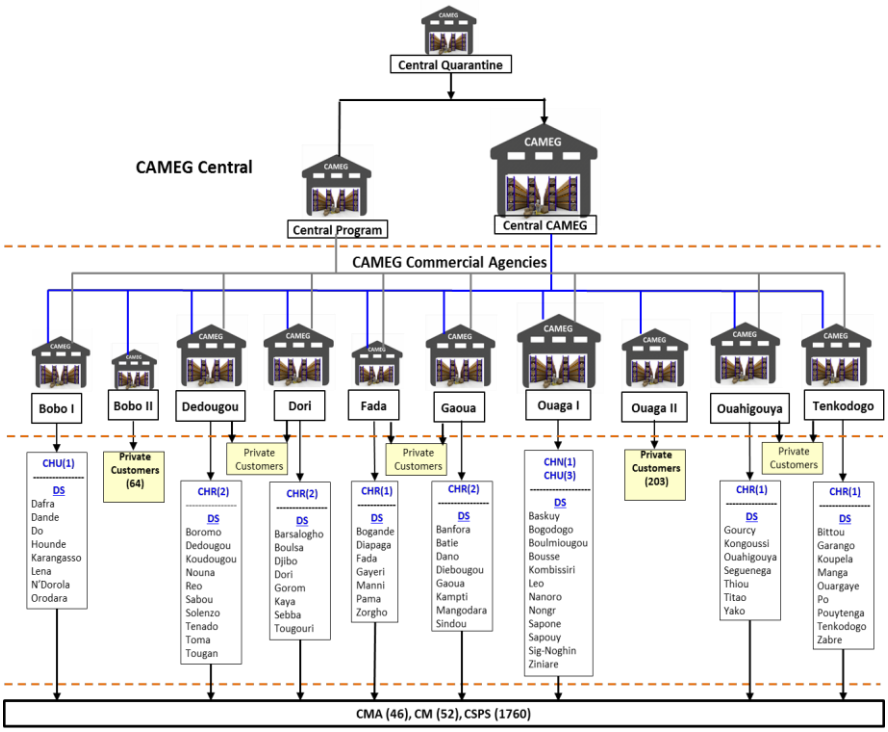

Figure 1. The three-tiered public-sector supply chain in Burkina Faso

3.4. HEALTH ACCOUNTS IN BURKINA FASO

Health accounts provide a systematic description of financial flows related to the consumption of health care goods and services in a country for a given time period. Health accounts describe health expenditures and provide indicators (along with other statistical information) for improved monitoring and assessment of health system performance. The definition of pharmaceuticals provided in the SHA 2011 guide for the FP.3.2.1 classification Pharmaceuticals states: "Pharmaceuticals are defined as any chemical compound used in the diagnosis, treatment, or prevention of a disease or other abnormal condition. They include reactive and other chemical products used in laboratory tests."[9,10] This definition includes products such as vaccines and serums and reproductive health commodities such as contraceptive injections. Total health expenditure (THE) in 2018 was USD 859 million (FCFA 491.8

[7] President's Malaria Initiative Burkina Faso Malaria Operational Plan, FY 2019.
[8] Burkina Faso Supply Chain Assessment, 2017. Global Fund.
[9] Burkina Faso Supply Chain Assessment, 2017. Global Fund.
[10] OECD, Eurostat, WHO (2011). A System of Health Accounts, OECD Publishing. DOI: 10.1787/9789264116016-en.

billion).[11] This was an 11% decrease from 2017's THE of USD 905 million (FCFA 536.9 billion), which is attributable to current health expenditure, including pharmaceutical expenditure. Figure 2 shows trends in total health spending from 2013 to 2018.

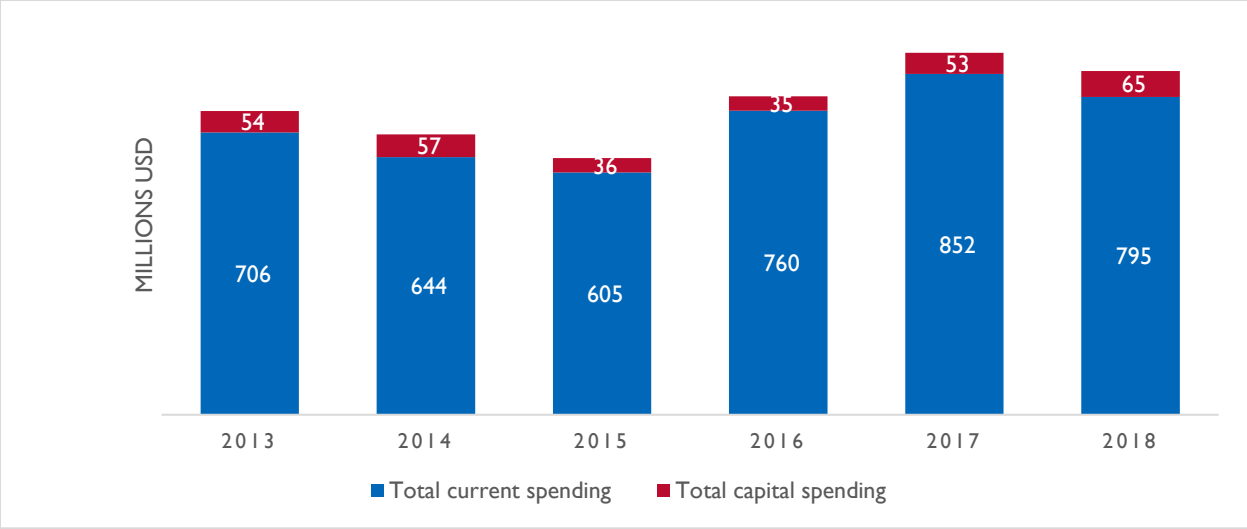

Figure 2. Trends in health expenditures in Burkina Faso, 2013–2018

On a per capita basis, health expenditure increased from USD 38 (FCFA 22,331) in 2013 to USD 47 (FCFA 27,885) in 2017 and then decreased 13.1% in 2018 to USD 42.34 (FCFA 24,242). Health spending as a percentage of GDP has varied over the past five years but rose from 5.6% in 2013 to 6.1% in 2018. The proportion of funds managed by public entities that were used to pay for inpatient and ambulatory care providers were 31.9% and 31.7% of TPE in 2018, respectively. Total OOP/household spending on health care was used to pay retailers and other providers of medical goods as follows: drug purchases (49%), hospital services (34%), outpatient health care providers (12%), and ancillary service providers (5%). Based on health accounts, pharmaceutical expenditure was estimated to be USD 147 million (FCFA 81.6 billion) in 2018 and USD 145 million (FCFA 84 billion) in 2017. The pharmaceutical expenditure estimates from health accounts are based on a household survey that queries respondents on OOP spending rather than on actual data collected from the health system.

4. RESULTS: WHAT CAN WE LEARN FROM THE BURKINA FASO PHARMACEUTICAL EXPENDITURE DATA OBTAINED USING THE SHA METHODOLOGY?

4.1. MORE ROBUST HEALTH ACCOUNT ESTIMATES WITH PHARMA EXPENDITURE TRACKING

The updated MTaPS analysis, which introduced a more robust approach to capturing pharmaceutical data that were previously not disaggregated, found that TPE was USD 353 million (FCFA 196.5 billion) in

[11] https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD?locations=BF

2018, which is ***more than twice as much*** as the previous SHA estimate of USD 147.8 million (FCFA 81 billion) for the same year. This amounts to approximately USD 16.95 (FCFA 9,706) per capita expenditure on pharmaceuticals based on the 2018 population estimate of 20 million instead of USD 7.39 per capita as originally projected. Using the latest estimates, the per capita spending varied by region and ranged from USD 13.3 (FCFA 7,609.32) in Centre Ouest district to USD 25.1 (FCFA 14,370.73) in the Centre Nord district. Overall, the 2018 NHA estimated total health expenditures as USD 834,458 (FCFA 477,769,000). Recomputing to include more accurate pharmaceutical spending puts the estimated total health expenditure in 2018 at USD 1,036,168 (FCFA 593,258,000), or 24% higher than previous estimates. In addition, based on the more robust pharmaceutical expenditure tracking, the THE estimate when adjusted to include the revised spending on pharmaceuticals shows that pharmaceutical spending represents almost one-third (33.12%)[12] of the 2018 THE.

Combining top-down and bottom-up approaches for data gathering as adopted by MTaPS increased the accuracy of pharmaceutical expenditure tracking. For example, MTaPS captured total imports as recorded by CAMEG at the national level and the total dispensed medicines at the district and health facility level, which improved the accuracy of estimates of the overall total spending on pharmaceuticals. The current approach also provides a detailed analysis of the geographical distribution of expenditures and revealed major geographic inequities in pharmaceutical spending, with poorer regions spending less per capita than more affluent areas. An important concern for countries is how the TPE is distributed geographically across districts (figure 3). This information is of interest in terms of equity of resource allocation. For example, in 2018 our analysis revealed that the Centre District, the Centre Nord , and Haut Bassins accounted for 40% of pharmaceutical spending even though they represent 30% of the population. In contrast, Mouhoun, one of the poorest regions in the country with a poverty rate of 60%,[13] accounted for 7% of TPE despite representing 9.3% of the country's total population. Its per capita pharmaceutical spending was also lower than the national average, at FCFA 7,640. The wealthier Centre Nord region, with a lower poverty rate of 22% and 9.1%[13] of the population, had the highest per capita medicines spending of FCFA 14,370 (twice that of Mouhoun—highlighting potential inequity in distribution in pharmaceutical resources (figure 4).

[12] The 2018 NHA estimated total health expenditures as FCFA 477,769,000. Recomputing to include pharma spending puts the estimated total health expenditure in 2018, as 593,258,000

[13] Health Accounts 2018- Global Accounts; sub-health expenditure analysis for Malaria, HIV/AIDS, Tuberculosis and Reproductive Health

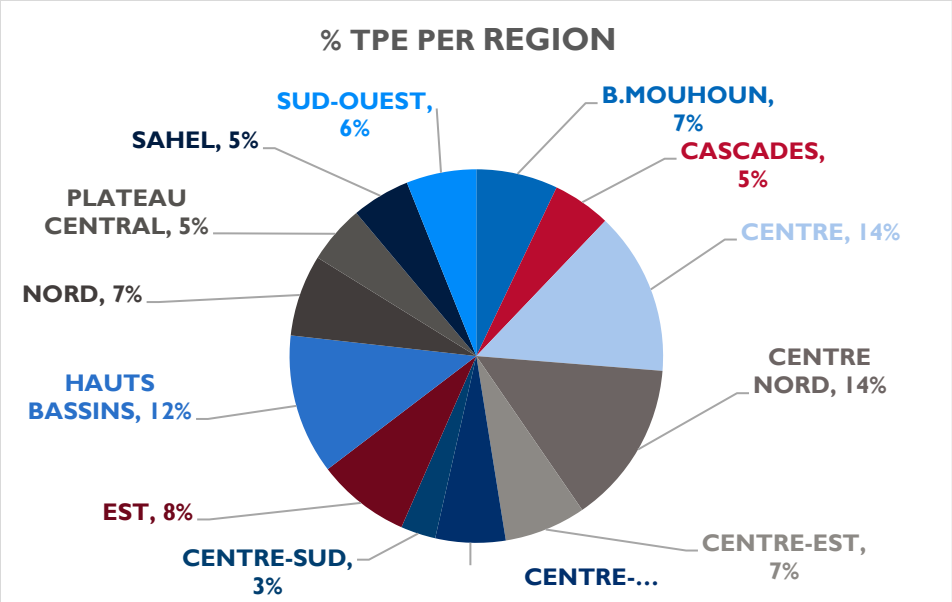

Figure 3. Pharmaceutical expenditures disaggregated by district in Burkina Faso

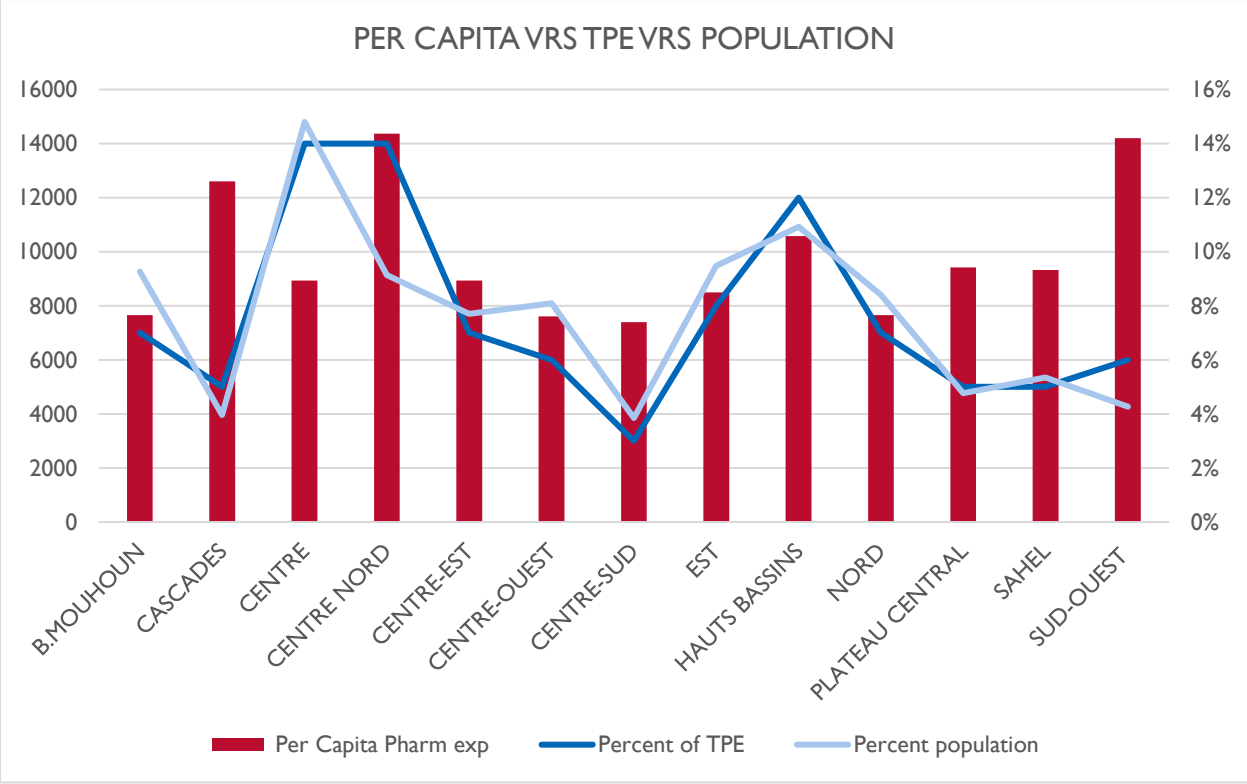

Figure 4. Per Capita Pharmaceutical expenditures disaggregated by district and population

4.2. SOURCES OF PHARMACEUTICAL EXPENDITURE FUNDING

Understanding pharmaceutical funding sources—donors, government sources, and households—is important for countries as they plan to raise sufficient resources for pharmaceuticals sustainably and equitably. To understand the proportion of TPE paid by households OOP, we organized the data by source of funding. As indicated in figure 5, 63% of TPE was from OOP sources. This indicates very limited financial protection for pharmaceuticals, meaning that many households may struggle to pay for their needed medicines. For the districts with high poverty rates, access to medicines may lead to catastrophic consequences worthy of further investigation.

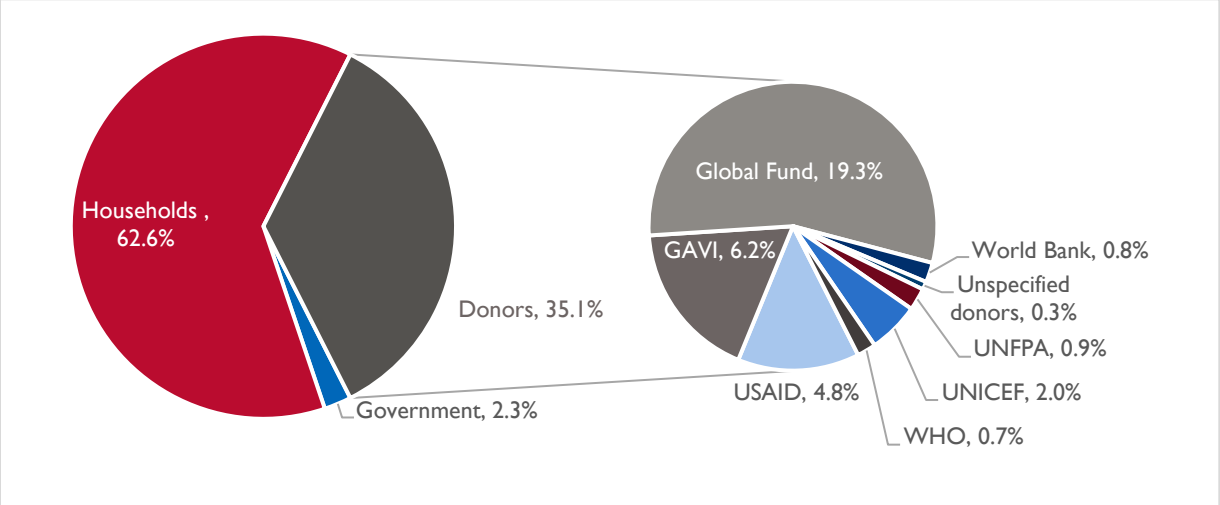

Figure 5. Pharmaceutical spending by source of funding

4.3. IMPROVED UNDERSTANDING OF EXPENDITURES BY PROVIDER TYPES

The pharmaceutical expenditure tracking approach adopted also helps analyze the **level of expenditure by different providers of pharmaceutical and medical products.** Private pharmacies represented the bulk of expenditures on pharmaceuticals (39%), followed by public general hospitals (24%), public pharmacies (23%), nonspecialized ambulatory health care centers (11%), and providers of preventive care (3%), meaning that 62% of medicines are distributed by public and private pharmacies, with a larger distribution occurring in the private sector. It is important that support be provided to private and public pharmacies to increase access to quality service and availability of medicines. As in many LMICs, pharmacies in Burkina Faso remain an important port of call for medicines. With a high proportion of medicines obtained in private pharmacies, it is important to optimize pricing of pharmaceuticals, especially in districts with high poverty indices where OOP could increase. Again, at the policy level it is important to ensure equitable physical distribution of private pharmacies to increase access to this important port of call for many Burkinabes.

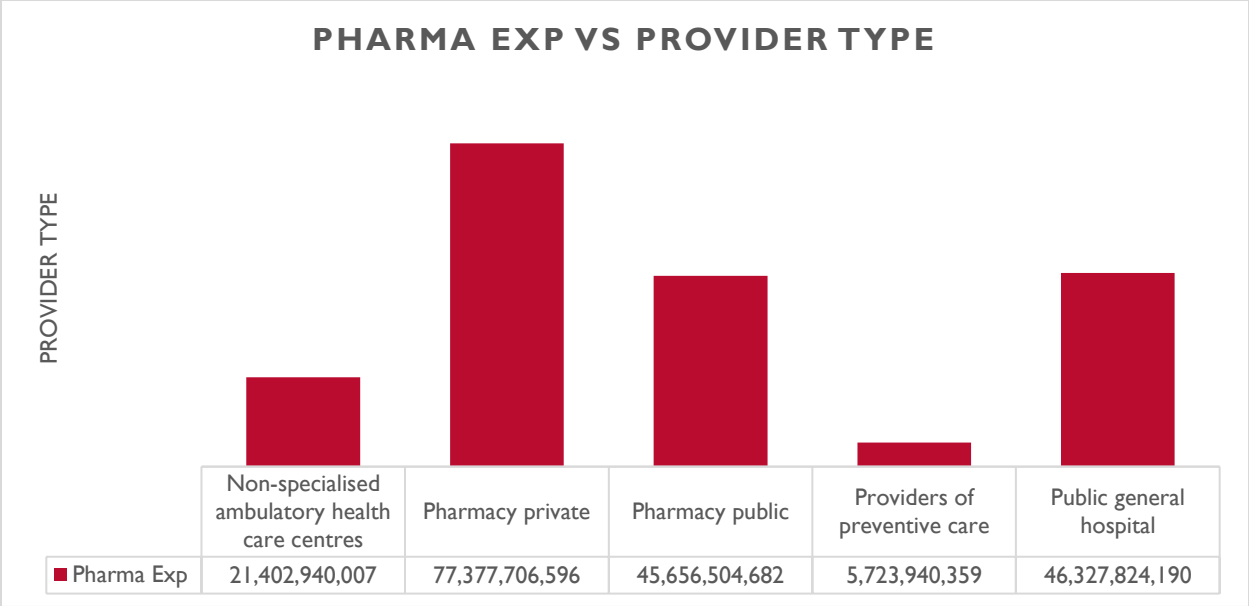

Figure 6. 2018 Pharmaceutical expenditure per provider type

MTaPS also estimated how closely the distribution of pharmaceutical expenditure reflects the disease distribution within Burkina Faso. The team explored how drug expenditures are distributed across therapeutic classes of medicines, such as antimalarials, antihypertensives and antidiabetics, and for specific health programs, such as TB and HIV, analyzing which accounts for the largest proportion of pharmaceutical expenditure. This analysis highlighted that antiretrovirals (ARVs) (HIV drugs) accounted for 16% of TPE, antimalarials for 12%, and vaccines for 8%.

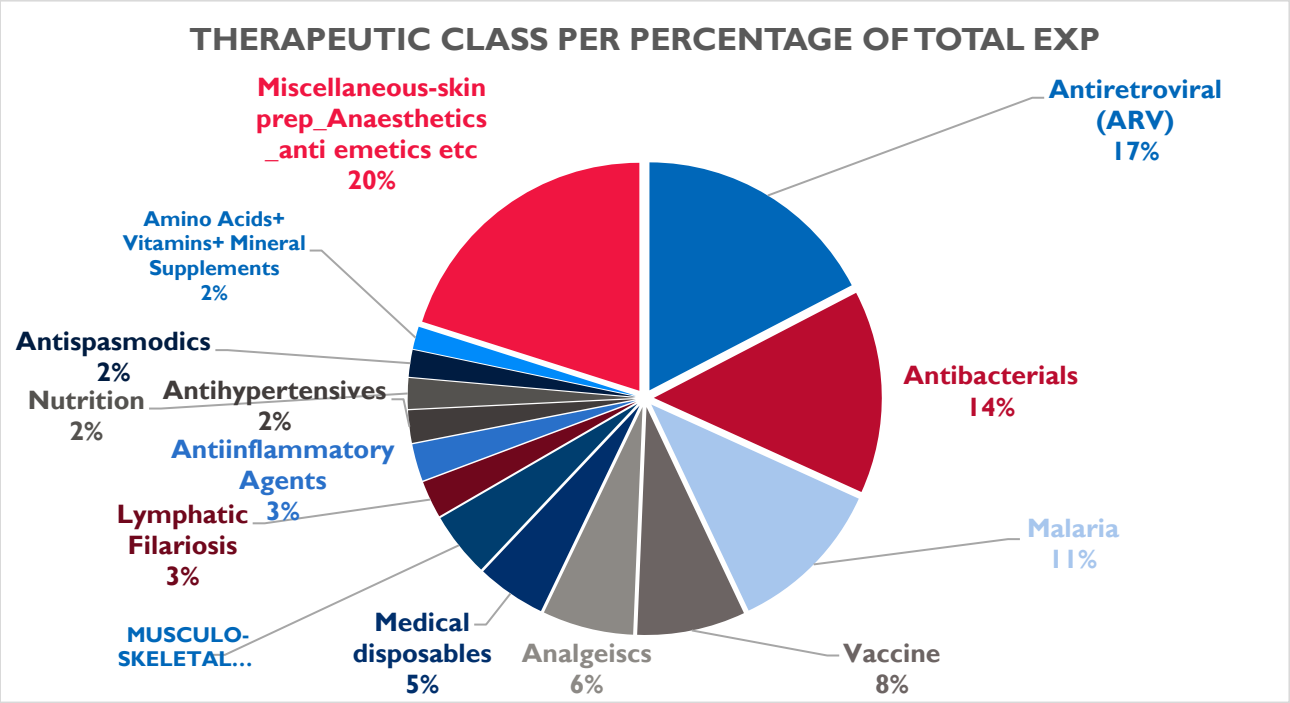

Figure 7. Total pharmaceutical expenditure per drug therapeutic class

4.4. EVIDENCE-BASED DECISION MAKING FOR REPRIORITIZATION OF RESOURCES

The pharmaceutical expenditure data enable policy makers in Burkina Faso to identify how current funding is spent on key medicines and commodities and informs continued budget allocation and investment decision making for key products. Expenditure data also inform future reprioritization and reallocation for procurement. Pharmaceutical expenditure, while influenced by other determinants such as disease incidence and usage rates within a jurisdiction, is broadly computed as a product of quantity consumed and prices of products. If adherence to treatment guidelines is optimal, high prices may be isolated as a cause of high expenditures. This work provides preliminary data to enable further research into isolating the causes of high pharmaceutical expenditure for particular therapeutic classes in Burkina Faso.

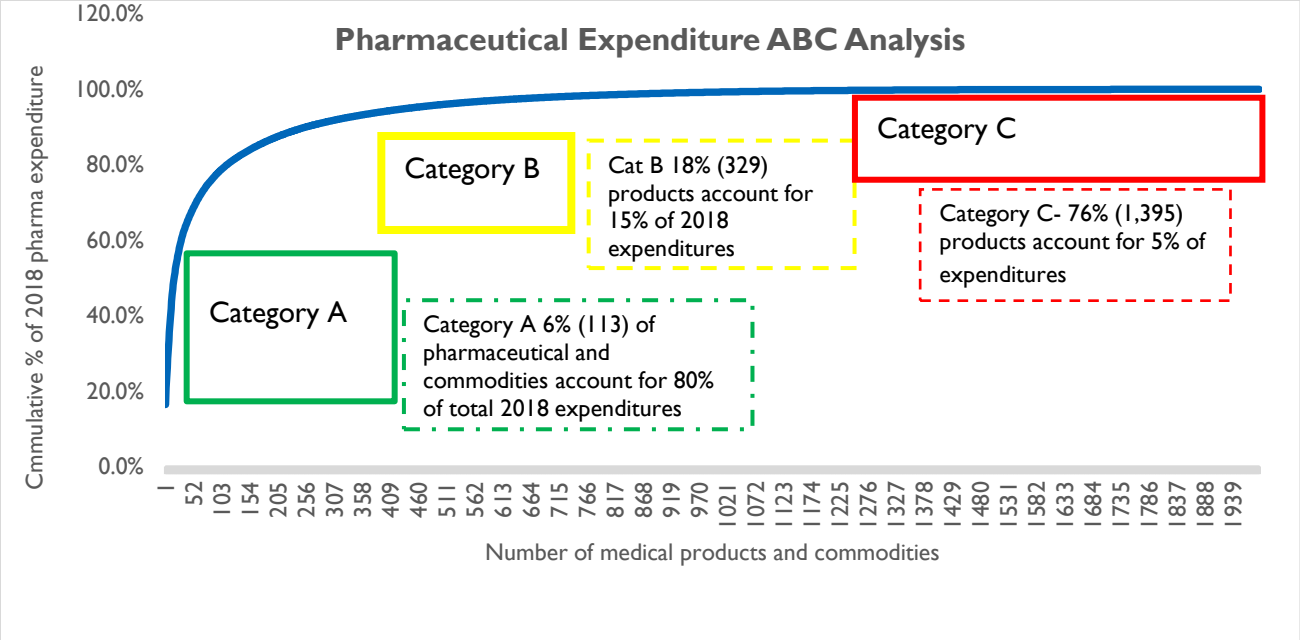

Figure 8: Pharmaceutical expenditure - ABC analysis

ABC analysis, also referred to as ABC classification, is an integral part of material management. It is a categorization method that is based on Pareto's economic principle that optimum economic growth occurs only due to a small part of the economy (80: 20 rule) and that the input and outputs of a system are not always equal. ABC analysis classifies expenditures, revenues, and inventory into three distinct categories and prioritizes their management based on the value.

Figure 8 shows that only 6% of the products (113 of 1,937—Category A) accounted for 80% of total pharmaceutical expenditure in Burkina Faso in 2018. By contrast, 18% of the products (329 of 1,937—Category B) accounted for only 15% of expenditures and 1,395 products— Category C—accounted for 5% of expenditures. The exercise further showed that most of the Category A products were HIV products, namely lopinavir/ritonavir and efavirenz + emtricitabine + tenofovir disoproxil fumarate. These two combination ARVs accounted for 17% of the top 113 products.

Policy makers in Burkina Faso can use these data to explore how actual pharmaceutical expenditures compared with government forecasts and budgets for the year.

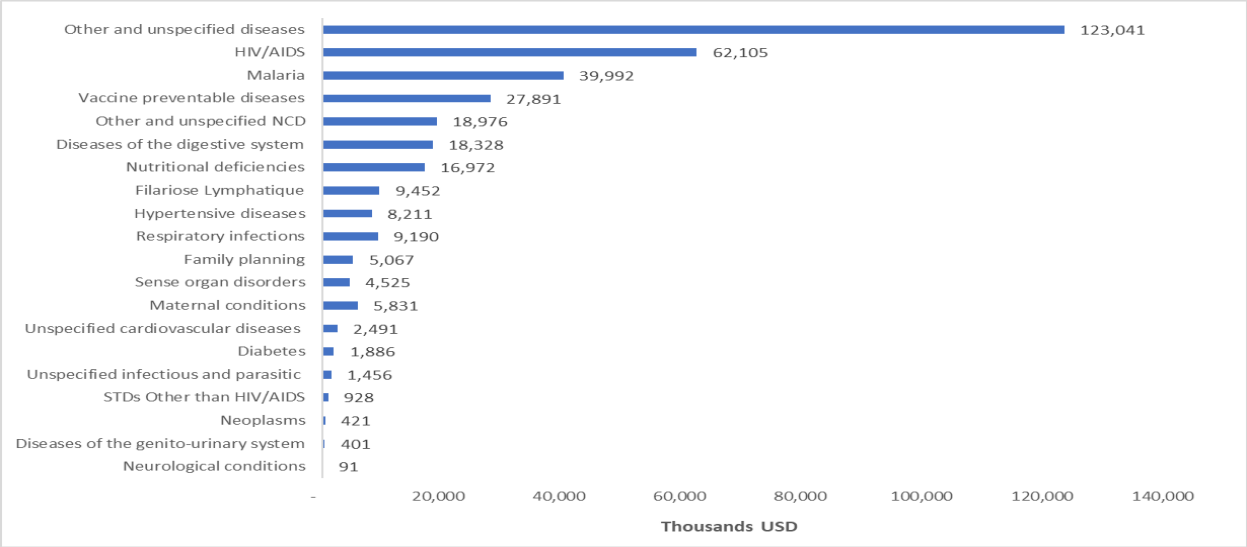

Figure 9. Distribution of drug expenditure per Health Account disease classification in Burkina Faso (2018)

The Burkina Faso pharmaceutical expenditure data showed that, apart from "other and unspecified diseases," HIV expenditure absorbs the highest share of pharmaceutical expenditure, followed by malaria and vaccines (figure 9). Drug expenditure for malaria ranks second (FCFA 22 billion) after HIV (FCFA 34 billion) even though malaria is a leading cause of morbidity and mortality in Burkina Faso with a disability-adjusted life year (DALY) of 6,683.3 per 100,000 population. According to the US President's Malaria Initiative's Burkina Faso Malaria Operational Plan FY 2019, malaria is one of the main causes of disease and death in Burkina Faso, with approximately 7.9 million cases and 27,800 deaths in 2018. According to UNAIDS, the HIV prevalence in Burkina Faso stabilized at 0.8% from 2015 to 2017. In 2018, the number of people living with HIV in Burkina Faso was estimated at 94,000, including 9,400 children under the age of 15. The total number of HIV-related deaths in the reproductive ages of 20–29 years was 603 in 2017 (815.64 DALYs per 100,000 population) and dropped to 196 as of 2018 with a DALY of 742.82 DALYs per 100,000 population.[14] Given the preliminary nature of this exercise and the absence of multiyear data, it may be useful to explore trends to establish causes of high pharmaceutical expenditures for HIV as case incidence stabilizes and death resulting from HIV diminishes. A decreasing death rate implies more survivors, which may require increased use of routine HIV medications and hence a potential need for higher allocation of pharmaceuticals resources for people living with AIDS.

According to the Ministry of Health, malaria accounts for 43% of consultations with a health provider and contributes to 22% of deaths.[15] The Ministry's Epidemiological Bulletin reported that Burkina Faso recorded 3,501,245 cases of malaria, including 1,002 deaths, during the first half of 2018, for a case fatality rate of 0.7%.

[14] National Strategic Plan for HIV/AIDS and Sexually Transmitted Infections (NHSP-AIDS) 2021-2025 Burkina Faso, draft version October 2020

[15] PMI's Burkina Faso Country Brief, PMI's Burkina Faso Malaria Operational Plan FY 2019, 2019 World Malaria Report Burkina Faso Country Profile, PMI Impact Malaria Burkina Faso, et le PNLP du Burkina Faso

5. CONCLUSION AND RECOMMENDATIONS: USING PHARMACEUTICAL SPENDING DATA FROM EXPENDITURE TRACKING TO INFORM POLICY AND PLANNING IN BURKINA FASO

Pharmaceutical expenditure tracking provides rich data for pharmaceutical decision makers, such as the contribution of government, donors, and household OOP spending on pharmaceuticals. Data could also inform efforts to plan for sustainable financing of programs that are largely donor funded in the current environment of declining donor funding. As countries move towards universal health coverage, their implementation teams can make decisions on the proportion of government and individual OOP contributions needed to develop sustainable universal health coverage programs and to ensure sustainable financing of pharmaceuticals.

The Burkina Faso pilot, which introduced a more robust approach to capturing pharmaceutical data that were previously not disaggregated, found that TPE was USD 353 million (FCFA 196.5 billion) in 2018—more than twice as much as the previous SHA estimate of USD 147.8 million (FCFA 81 billion) for same year. This amounts to approximately USD 16.95 (FCFA 9,706) per capita expenditure on pharmaceuticals based on the 2018 population estimate of 20 million instead of USD 7.39 per capita that was originally projected. To support evidence-based decision making for reprioritization of resources, MTaPS' work provides preliminary data to enable further research into isolating the causes of high pharmaceutical expenditure for particular therapeutic classes or disease categories in Burkina Faso. For example, the exercise highlighted that only 6% medicines and commodities accounted for 80% of the TPE in 2018. Subsequent tracking exercises will enable Burkina Faso to better compare its overall spending over time with forecasted needs to help bridge funding gaps to meet country needs. As more routine data collection becomes possible, household purchases from pharmacies and routine direct-to-user sales data should be included to better estimate the OOP payment for medicines. Further analysis could potentially be undertaken to analyze other parameters like branded vs. generic, proportion of drugs available, or the national essential medicines list that are of interest to policy makers. A regulatory requirement and advocacy effort to enhance increased use of electronic point-of-sales systems and electronic medical records in all public and private pharmacies, providers of preventive care, and public general hospitals would enable easy collection and aggregation of data as well.