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Analysis of Allocative Efficiencies on the Health Sector Budget in Namibia

LOCAL HEALTH SYSTEM SUSTAINABILITY PROJECT

Local Health System Sustainability Project

The Local Health System Sustainability Project (LHSS) under the USAID Integrated Health Systems IDIQ helps low- and middle-income countries transition to sustainable, self-financed health systems as a means to support access to universal health coverage. The project works with partner countries and local stakeholders to reduce financial barriers to care and treatment, ensure equitable access to essential health services for all people, and improve the quality of health services. Led by Abt Associates, the five-year project will build local capacity to sustain strong health system performance, supporting countries on their journey to self-reliance and prosperity.

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Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy
COVID-19	Coronavirus disease 2019
DHIS	District Health Information Software
GDP	Gross Domestic Product
GNI	Gross National Income
GRN	Government of the Republic of Namibia
HFG	Health Financing and Governance Project
HIV	Human Immunodeficiency Virus
HR	Human Resources
HRH	Human Resources for Health
IFMIS	Integrated Financial Management Information System
IHME	Institute for Health Metrics and Evaluation
IPD	In-Patient Department
LHSS	Local Health System Sustainability Project
MMR	Maternal Mortality Rate
MoF	Ministry of Finance
MoHSS	Ministry of Health and Social Services
MTEF	Medium Term Expenditure Framework
NAMAF	Namibian Association of Medical Aid Funds
NAMFISA	Namibia Financial Institutions Supervisory Authority
NCD	Non-Communicable Disease
NIP	National Institute of Pathology (NIP)
NPC	National Planning Commission
OOP	Out-of-Pocket
OPD	Outpatient Department
PBB	Program-Based Budgeting
PER	Public Expenditure Review
PPP	Public-Private Partnership
PSEMAS	Public Service Employees Medical Aid Scheme
SADC	Southern Africa Development Community
SDGs	Sustainable Development Goals

TB	Tuberculosis
TWG	Technical Working Group
UHC	Universal Health Coverage
UMIC	Upper Middle-Income Countries
WHO	World Health Organization

Executive Summary

Though the Government of the Republic of Namibia has committed to ensuring affordable, accessible, and equitable health services for all, this commitment is under threat as the country faces a constrained fiscal space. This constraint has been exacerbated by the coronavirus disease 2019 (COVID-19) pandemic, which has increased socioeconomic challenges, as well as pressure on the government to spend more on health and other sectors to address the impact of the disease. Furthermore, the country is already battling the increasing burden of non-communicable diseases and unmet elimination targets for infectious diseases such as the human immunodeficiency virus (HIV). These challenges, along with significant population growth coupled with high rural-to-urban migration rates by a youthful population raise the urgency to increase health funding and examine how available resources can best be used.

Namibia consistently spends a significant share of its government budget on health (almost 15% annually), yet it has failed to achieve the expected outcomes due to a variety of potential inefficiencies. This analysis identified several inefficiencies related to how the financial budget and other financial resources are allocated and spent. Such inefficiencies include weak budgetary practices, including poor implementation of program-based budgeting (PBB), limited program directors' engagement in the budgeting process, use of line-item incremental budgeting, low budget holder autonomy and spending outside the approved budget. Furthermore, inconsistency in budget disbursements from the Ministry of Finance (MoF) to the Ministry of Health and Social Services (MoHSS) and in turn to sub-national levels may force subnational level budget holders to prioritize goods and services that can be obtained through credit or accruals over those requiring cash on delivery. As a result, domestic government arrears totaled 2.4% of GDP in 2017, with 13% of that amount occurring in the health sector (PER, 2019)

While the MoHSS's allocation of its annual budget to salaries and other staff costs has steadily risen to over 50% from 41% in 2009, the health sector's expenditure on capital formation remains inadequate to meet the population's growth and changing distribution, as well as financing technology improvements that would drive better diagnoses and treatment.

Allocation to health functions is skewed towards curative care; over 59% of the budget is spent on outpatient and inpatient curative care at the hospital level, while primary care receives only 13% (MoHSS, 2022). Budgetary allocations to regions remain inequitable and are not adequately informed by population size, disease burden, or other evidence. Furthermore, the annual government budget does not provide enough detail on actual amounts allocated to specific disease areas beyond the overall program allocations. Addressing the potential inefficiencies has the potential to unlock value for money within existing resources, and helps the country expand delivery of adequate essential health services in line with universal health coverage (UHC) goals.

The following reform options are presented as potential actions that can improve resource allocation within the MoHSS budget and address some of the challenges identified during the analysis:

- Strengthen the engagement and relationship between MoHSS and MoF to improve health allocation alignment with national priorities.
- Fully implement PBB and move away from the current presentational framework toward outcomes and performance-driven budgeting framework.

- Provide more autonomy to budget holders at national and subnational levels, and transition away from line-item budgeting as part of the comprehensive PBB reform.
- Develop a resource-allocation formula to provide objective, independent criteria closely related to national priorities and health needs as a basis for budgeting resources to promote a more equitable allocation.
- Identify and correct any barriers to regular and consistent disbursements of funds from the MoF to reduce ad hoc and accrual spending.
- Engage MoF for the development of a framework to enable tertiary care facilities to retain and use funds collected directly without remitting these to the Treasury.
- Engage the National Planning Commission (NPC) and MoF towards increasing spending on capital budgets as a critical driver to continued investment in infrastructure and equipment required for equitable quality health services.
- Strengthen HRH management and deployment within the MoHSS towards cost control and improvements in the health workforce as the most significant cost driver for the health sector.

Implementation of the above recommendations provides a starting point for further work on strengthening resource allocation within the MoHSS. The recommendations are not listed in any order of priority and can be addressed based on stakeholder appetite and the complexity of reforms required. Some interventions require buy-in from other line ministries and action from policy-level decision-makers, while others can be undertaken within the MoHSS. This provides the MoHSS with a range of potential interventions, including ways to address inefficiencies in resource allocation that are “low-hanging fruits”.

Introduction

The Government of the Republic of Namibia (GRN) is mandated to deliver essential health services and ensure equity, sustainability, inclusion, and multi-stakeholder participation in health care decision-making. To realize the mandate, the government has embarked on a pathway to achieving universal health coverage (UHC) as a priority reform to provide equitable and accessible quality health services.

However, in a climate of increased health burden due to the coronavirus disease 2019 (COVID-19) pandemic, diminishing donor funds (especially from The Global Fund which has signaled intention to fully transition out of Namibia), and a declining economy, achieving this objective will only be possible if funding is coordinated effectively and efficiencies are maximized. Increasing the value for money in utilization of current funding should be the GRN's main priority, while making progress on UHC may require the GRN to find additional budgetary resources in the medium to long-term.. The GRN has drawn attention to the need to increase allocations to health and other line ministries and has also focused on improving the distribution and use of available resources.

The economic slowdown due to COVID-19 and the increase in demand for, resources to counter the negative impact of the disease, high debt to GDP ratio, along with a growing population and changing disease burden—has increased pressure on the GRN to contain expenditures and achieve higher value for money in current budgets. Meanwhile, resources for health from international donors are under stress as funders signal intention to transition and ensure sustainability.

This report analyses potential allocative efficiencies that can be achieved through budgeting reforms to the health sector—from the national to the subnational level. WHO defines allocative efficiency as allocating resources to provide the optimal mix of goods and services to maximize benefits to society (WHO, 2018). Perfect allocative efficiency is reached only when producing more health gains by moving resources from one health input to another is impossible. For example, if Namibia could see improved health outcomes by reallocating resources from hospital care to primary care, it has not yet maximized allocative efficiency. In this report, allocative efficiencies are analyzed in the context of the Namibian health system and evaluated against set goals as outlined in national strategies and international benchmarks such as the Sustainable Development Goals (SDG). The review focuses on whether the Ministry of Health and Social Services (MoHSS) provides financial resources to do "the right things" and whether this money is allocated in the "right way". The review also considers how the available resources are allocated to different regions, diseases, and levels of care.

In conducting this analysis, an extensive literature search was conducted to identify documents on the Namibia health sector. Over the last few years, Namibia has commissioned various analyses to examine potential efficiencies within the health sector. These analyses included a study on hospital efficiencies done in 2018, a Public Expenditure Review (PER) conducted in 2019, and a resource tracking of health and human immunodeficiency virus (HIV) expenditures survey for 2017/18. Most recently, the MoHSS has finalized a Health Sector Review (2022), which looked at the performance of the overall health sector, including financing. Such documents, amongst others, were identified during the literature search and informed this brief. The report relied on qualitative analysis of existing data, and though quantitative analysis was conducted where possible, no economic models were used to quantify the level of efficiencies. The analysis is not intended to be prescriptive, but rather, brings together various sources of

evidence to identify potential inefficiencies—providing a starting point for stakeholder discussion and a roadmap for reforms.

Namibia has embarked on a roadmap to develop UHC reforms across different areas of the health system, including health financing. This report will inform the discussion on actions needed to ensure domestic resources are used to achieve more value for money. Furthermore, the MoHSS will develop a roadmap to implement reforms necessary to address potential inefficiencies. The MoHSS understands health-sector reforms are complex and require a systematic approach; hence, this analysis will also inform discussions in other areas of the health sector, including HRH, pharmaceuticals, and infrastructure, among others.

Context

Socioeconomic Environment

Namibia's size, combined with a dispersed population and a population density that is among the lowest globally make it challenging for the health sector to provide universal access to services across the country. With a 2020 population estimated at 2.54 million, Namibia has less than 3 people per km^2 spread out across 14 regions (Worldometer, 2022). Approximately 60% of the population lives in the North, 33% in the central highlands, and 7% in the arid southern regions (MoHSS, 2022). Khomas region includes the capital Windhoek and accounts for about 18% of the population.

The country is ranked as an upper-middle-income country (UMIC) with a gross national income (GNI) per capita of US $4,500 (2020), which is closer to the lower bound of the per-capita GNI classification for a UMIC (range between US$4 045 and US$12 525) (World Bank, 2021). The economic impact of COVID-19 to Namibia's economy has also been devastating, as real gross domestic product (GDP) contracted by as much as 7.4% based on World Bank estimates and as low as 14% based on Kaiser Family Foundation (KFF) estimates in 2020 (World bank, 2021, Kff.org, 2022) even though the growth trend had started to falter as early as 2015. Ultimately this has affected general revenue collection, which has plateaued at 30% of the GDP. In response to declining fiscal space, the government has worked hard to contain public spending; however, fiscal deficits have increased to about 5.5% of GDP, driven largely by the reduced revenue of the past several years.

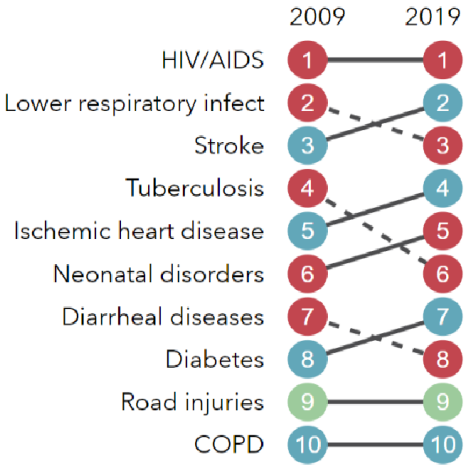
Income inequality remains high in the country, with the top 10% benefitting from about about 64% of the total income for Namibia, with the bottom 40% seeing 4% of the total income. As a measurement of inequality, Namibia's latest recorded Gini Index coefficient of 0.59 (World Bank, 2015) reveals significant income inequalities that are globally second only to South Africa. Regional inequalities have also persisted with development mostly crowded around the Khomas region, despite migration patterns to urban areas continuing to create many challenges for the country regarding service provision to the ever-expanding unplanned peri-urban areas.

Health Service Provision

Post-independence, access to health services has faced challenges, although significant progress has been made. The provision of health services in Namibia is currently split between three main provider groups: the government (70–75%), faith-based providers (15–20%), and the private sector (5%) (MoHSS, 2022). The primary faith-based providers (Lutheran, Roman Catholic, and Anglican) are not-for-profit and predominantly work in rural areas. The Health System Review notes that about 43.9% of the population access medical services from clinics and 28.1% from hospitals. In the rural areas, clinics constitute the most common providers of care (54%), followed by health centers with 15.1%. Due to the dispersed settlements, an estimated 21% of the population lives more than 10km from the nearest health facility. The Health System Review also shows that the private sector provides 51.5% (17.8% by private hospitals and 33.7% for other private-sector providers) of overall services in urban areas. Private facilities are mainly used by the 20% of the population covered by medical insurance, which is expensive and beyond the reach of many patients who pay for health services at point of care.

The progress that Namibia has seen in addressing its health needs has been made even as the country has faced an increasing double burden of communicable and non-communicable diseases (NCDs). Infectious diseases remain the largest driver of morbidity and mortality. Based on District Health Information System (DHIS) data presented in the recent Health System Review, respiratory system diseases, musculo-skeletal system disorder, common cold, and diarrhea have remained the top causes of morbidity in out-patient department (OPD) units from 2009 to 2020. Figure 1 below shows the top 10 leading causes of death from 2009 to 2019 based on all-cause mortality data from the Institute for Health Metrics and Evaluation (IHME).

Figure 1: Top 10 Causes of Deaths in Namibia



	% change, 2009-2019
HIV/AIDS	-31.3%
Stroke	13.1%
Lower respiratory infect	-0.6%
Ischemic heart disease	22.3%
Neonatal disorders	-16.2%
Tuberculosis	-28.7%
Diabetes	21.2%
Diarrheal diseases	-22.7%
Road injuries	7.1%
COPD	9.3%

Source: IHME Database, 2022.

While the country has progressed in the fight against HIV, data from IHME (2022) show that it remains the top cause of illness and death between 2009 and 2019. Maternal, newborn, and child health have emerged as key priorities to be addressed to meet SDG targets. The Health System Review (2022) notes that Namibia has the second-highest maternal mortality rate (MMR) among UMICs, with HIV/acquired immunodeficiency syndrome (AIDS) contributing indirectly to 37% of maternal deaths. The under-five mortality rate has decreased in the last decade but is still almost four times higher than the UMIC average. About 32% of under-five deaths occur in the first month of life, highlighting the importance of newborn care (PER, 2019). Over the same period, NCD's share of mortality rose to 38.7% from 36.7%, with diabetes among the top-10 reasons for premature death (MoHSS, 2022). The impact of NCDs between 2020 and 2021 may even be higher as conditions such as diabetes and high blood pressure exacerbated COVID-19 mortality, with the country reporting 4,075 deaths since the pandemic began through mid- August 2022 (Worldometer, 2022).

The situational context for the country shows that while it has progressed in addressing some health needs with an advanced and better-equipped health sector compared to regional neighbors, Namibia cannot afford to reduce funding for health and efforts to improve health service delivery. Furthermore, the impact of COVID-19 on global and local economies will force the government to make hard choices on how it uses available resources. Faced with limited options to increase fiscal space for health, Namibia will need to ensure more value for money from current resources. This will mean exploring allocative and technical efficiencies to unlock savings within the existing envelope.

Discussion of Findings

Challenges in the Budgetary Planning Process

Given the funding available to the state, a consideration of budgeting is essential in determining what services will be produced and provided within Namibia's health system. The country's budgetary process provides medium-term alignment and guidance through the Medium-Term Expenditure Framework (MTEF). However, various gaps and challenges have been cited at the Ministry level, creating potential inefficiencies in allocating financial resources. Such gaps include poor implementation of PBB, limited program directors' engagement in the budgeting process, use of line-item incremental budgeting, and spending outside the approved budget.

Guided by the state Finance Act Chapter 31 of 1991, the country's budgeting and planning process is robust at the overall national level though gaps exist at the MoHSS level, with a well-defined process from budget preparation to enactment, execution, budget control, audit, and assessment. The Health System Review noted a strong budget alignment to national priorities, including the National Strategic Plan, the Harambee Prosperity Plan, and the Health Policy.

The MTEF guides the level of resources available to line ministries over a two to three-year period, enabling forecasting and better prioritization. While variations in allocations are experienced, these generally do not differ significantly from what is projected in the MTEF. Annually, the Ministry of Finance (MoF) and line ministries negotiate the actual funding based on submitted plans and the MTEF. During this process, the National Planning Commission (NPC) leads in developing the capital/development budget by supporting line ministries in the negotiation process. Both the recurrent and development budgets are fully integrated with the Integrated Financial Management System (IFMIS), which has made it easier to track expenditures.

However, at the MoHSS level, the budget remains input- and line item-based, making it inflexible and difficult for managers to reallocate funds to emerging priorities at the local level. Line-item budgeting provided resources for specific inputs with limited linkage to the required health outcomes. For example, units can have a high allocation for fuel, yet other needed inputs such as medicines and drugs may be under-budgeted. While re-allocating funds between budget line items (virementing) is possible, the complex process to do so reduces the fungibility (flexibility) of resources available to budget holders. Spending based on line-item allocations may therefore result in directorates chasing spending targets instead of outputs (health services).

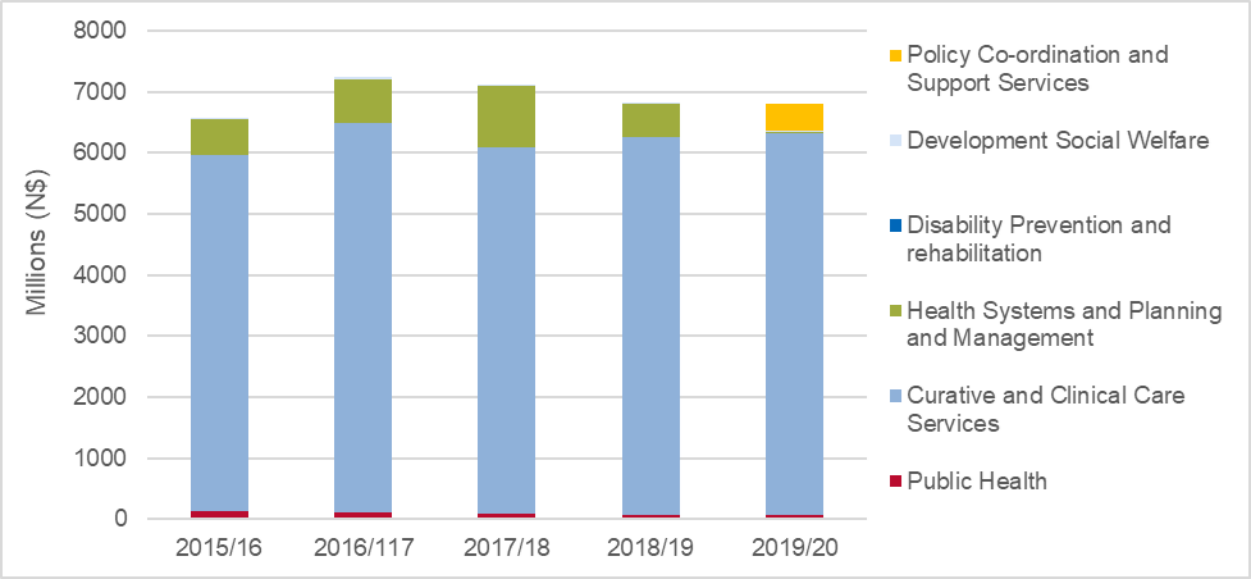
To address this, the PBB process introduced in 2005 attempted to move the focus from inputs to emphasizing outputs, enhanced performance-monitoring, and autonomy of the budget holder. Furthermore, PBB was expected to shift the budgetary planning process to focus on program goals, such as services to be delivered and the population to be covered. In contrast to the MTEF process—where MoF sets budget ceilings, and future budgets are incremental without a solid relationship to what outcomes need to be achieved by the MoHSS—the PBB process follows a bottom-up budgeting approach with sub-programs defining their goals and the resources needed to achieve them.

To ensure the full benefits and potential of PBB can be realized, effective linkages with performance and resources allocated are needed. Though Namibia reconfigured its health-sector budget presentation to reflect the PBB approach, PBB is not reflected in actual

implementation, as the MTEF still guides the overall process and budgets remain line item-based. The 2017 PER furthermore noted that while the MoHSS adopted broad program classifications such as “Communicable Diseases”, it is still difficult to assess what services will be provided within these broad categories.

Furthermore, because the budget remains input-based, budgets are excessively rigid within directorates and cannot be shifted across programs during execution as advocated by PBB reforms. Each directorate is still developing its own budget, and these are subsequently combined into one “program budget” with limited linkage to outputs and outcomes expected from each program. The graph below shows expenditure by different programs under the PBB framework as presented in the Health System Review of 2022.

Figure 2: Expenditure by Program Area



Source: Ministry of Health and Social Services Health Systems Review (2012-2021), 2022

Furthermore, the final budget is excessively opaque as it is difficult to ascertain how much was actually allocated to the different directorates within the MOHSS, in comparison to the old MTEF directorate-based budget. At the directorate level, the budgeting process remains unchanged, i.e., individual directorates prepare budgets for consolidation into a “program budget” by clustering the budgets of various directorates. This budgeting process diverges from the MTEF program budgets, where service delivery programs should be used instead of directorates.

Misalignment Between Budget Formulation and Policy Imperatives

The disconnect between the costed national health strategy, the MTEF, and annual health budgets shows limited use of cost data to inform resource allocation. As highlighted by the Health System Review, there is no evidence that data from the costed National Health Strategy 2017–2022 was used to inform the development of the MTEF and annual budgets for this period. (A costed national health strategy provides close estimates of what is required to attain specific health goals outlined in the national plan. Thereafter, resource allocation should closely follow, or be guided by, such cost estimates). Furthermore, there has been inadequate political will from the both the MoHSS and MoF to advance such broad budgetary reforms with

recommendation on strengthening PBB from an assessment in 2009 largely unimplemented to date. However, the on-going UHC reform process provides a key window of opportunity to resuscitate efforts towards budgetary reforms.

The costed plan also provides strong evidence of the "need" to progress toward UHC, as outlined in the strategic plan. The costing strategy identified three scenarios, with the "aggressive scenario" being ideal in moving the country towards the achievement of targets and goals outlined in the strategy. Though allocations to health following the 2017/18 budget cycle met and exceeded estimates for the aggressive scenario in the 2020/21 and 2021/22 cycles, this was mainly driven by COVID-19 spending. Over the life of the strategy, allocations did not significantly differ from the baseline estimates, showing the MoHSS would not have adequate resources to scale up implementation toward achieving ambitious strategic goals, unless current inefficiencies are addressed to unlock potential savings and achieve value for money in current budgets. The table below shows the funding gaps between the "aggressive scenario", and resources allocated through annual budgets.

Table 1: Comparison of National Health Strategy Costing and Health-sector Budget Allocation

Cost Scenarios	2017/18	2018/19	2019/20	2020/21	2021/22	Total (N$)
Aggressive Scenario	N$7,410M	N$7,717M	N$7,785M	N$7,848M	N$7,909M	N$38,669M
High Impact Scenario	N$6,881M	N$7,179M	N$7,246M	N$7,335M	N$7,435M	N$36,076M
Baseline Scenario	N$6,462M	N$6,728M	N$6,767M	N$6,809M	N$6,853M	N$33,618M
Budget Allocation	N$6, 982M	N$6,712M	N$6,873M	N$8,052M	N$8,141M	N$32,761M
Variance (budget compared against aggressive scenario)	(N$428M)	(N$1,005M)	(N$912M)	N$204M	N$232M	(N5,908M)

Source: Ministry of Health and Social Services Health Systems Review (2012-2021), 2022

Such discrepancies between final allocation from the MoF versus the MoHSS bids often point to a wide variation in perspective between the two ministries, wherein health is often regarded as a consumption rather than a vital economic driver. Furthermore, with discrete and off-budget donor funds being directed to health, the MoF widely believes that the sector is well-funded from such additional resources. Thus, it is always essential to bridge the gap in perspectives between the two ministries while taking into account enough data from resource tracking, costing, and other health strategies to present a robust health budget bid. Furthermore, involving focal persons from MoF in planning and routine strategic processes for the MoHSS can help bridge the gap and bolster the relationship between the two ministries, thereby improving the alignment of the budget-formulation process to national and ministerial goals.

Low Predictability in Budget Disbursements

An essential component in efficiently allocating resources is the timeliness and predictability of disbursements. However, while allocations may be nominally efficient "on paper", when disbursements are late and/or unpredictable, budget holders can be forced to make inefficient, or potentially inefficient, prioritization decisions. Furthermore, goods and services that can be obtained through credit or accruals are often prioritized over those requiring "cash on delivery" when cash on hand is limited. For example, the PER (2019) report shows that about 13% of government domestic arrears occurred in the health sector (7.4% of the annual MoHSS expenditures). These were largely driven by internal inefficiencies such as the National Institute of Pathology (NIP) setting prices without consulting the MoHSS, and wastage due to requested unnecessary tests by inexperienced physicians (PER, 2019). As a result, unpaid invoices accumulated due to underestimating NIP expenditures, leading to arrears. The Health System Review notes that the MoHSS spends more than the allocated budget; however, most of the disbursements are made towards the last quarter of the fiscal year. This ultimately results in a rush to exhaust the budget, sometimes to the detriment of priority services.

Limited Autonomy of Subnational Budget Holders

The 2019 PER report noted that health facilities and regions have limited management autonomy and financial management capacity, which impedes the efficient management of resources. Only a small portion of the national health budget is managed at the subnational level. Big-ticket items, such as health worker costs, are paid from the national level, while regional directors have some, but limited, autonomy to manage them. Minimal funds are disbursed to primary care facilities, with operational budgets being managed at the regional level.

Furthermore, primary care facilities cannot generate any income as most services provided at this level are provided to patients free of charge. Ultimately, this means allocation decisions made at the national level significantly impact the ability of primary care facilities to deliver essential services. This contradicts PBB principles, where providers at different levels require autonomy linked to performance management; however, most facility staff cannot currently be held accountable for the quality and quantity of services provided. Service provision is limited to whatever commodities and other resources the region and national level provide.

Budget disbursement from the national level is managed at the regional level or tertiary hospitals. However, the cash flow problems partly attributable to the restrictive monthly release system to regions and tertiary level hospitals inhibits regions and tertiary hospitals' ability to operate effectively. Negotiations on revised monthly or quarterly projections of cashflow requirements can drag out the release of funds to regions and tertiary hospitals to 10–14 days until MoF funds are received. The unpredictability of financing deters regions and hospitals from being able to adequately plan activities or implement services.

Furthermore, the PER notes that in 2018 the public health sector collected N$82,857,379 in total across all levels of care (equivalent to 23.7% of the total operating budget for referral hospitals). These funds could provide crucial liquidity during government cash flow problems but are currently unavailable to hospitals as they are returned to Treasury. Still, retention of revenues may become an incentive for improved revenue management by facilities resulting in higher user fees, which in turn could become another barrier to access services. The PER also notes that while attempts have been made to enable tertiary hospitals to retain their revenues, these have not been successful as central governments cite potential risks such as fraud and mismanagement. This finding was bolstered by results from the Health Financing and

Governance Project Hospital Efficiencies study in 2018, which shows that hospital committees are inefficient in making allocation decisions, including prioritizing procurements. Instances were noted where procurements have been issued multiple times, as there is no control over what has been approved/authorized, and the quality/completion of work is not monitored before payment.

Over the last few years, the government has begun a decentralization process expected to transfer more autonomy to regional leadership in resource allocation and disbursement. It is still unclear if this will improve allocation efficiencies at the subnational level. However, the current challenges already indicate the need for intensive capacity-building at the lower level if gaps observed at the national levels are not to be compounded.

The strengths of national-level budgetary processes are usually the focus when looking at national health budgets; however, what happens at the subnational level usually more directly impacts service delivery, user experiences, and patient outcomes. Addressing some of the challenges noted at the subnational level and providing more autonomy linked with capacity will help ensure efficient allocation of resources at this level. With limited resources, allocation decisions at the micro-level can have a far more significant impact on service delivery, and ultimately improve the quality and quantity of care.

MoHSS Allocation to Units of Production

The government budget allocation to various cost areas shows how funding is used to purchase various combinations of inputs. The MoHSS allocates over 50% of the annual budget on salaries and other staff costs, and this has been steadily growing over time. Trends data from the resource-tracking exercise for 2017/18 and the Health System Review (2022) show increases in expenditure for salaries, allowances, and 'other expenditures elsewhere not classified'. Capital expenditures, pharmaceuticals, and medical supplies have been relatively constant, even though marginal declines were seen between 2015 and 2018. Table 2 below shows the allocation trends to various cost categories between 2015 and 2018.

Table 2: Government Health Expenditures by Function

Economic Function	2015/16	2016/17	2017/18	Trend
Salaries	41%	43%	46%	+
Allowances	6%	6%	7%	+
Pharmaceuticals	16%	14%	12%	-
Medical supplies	6%	9%	4%	-
Other	22%	21%	26%	+
Capital	9%	7%	4%	-

Source: Ministry of Health and Social Services Health Systems Review (2012-2021), 2022

Inefficiencies in the distribution of staff, inadequate training, and unnecessary procedures have contributed to driving upwards the share of MoHSS budget allocated to staff costs. A qualitative review on technical efficiencies in hospitals in Namibia conducted by the HFG project in 2018 highlighted how HRH challenges led to inefficiencies—including excessive laboratory tests from under qualified doctors and poor diagnoses of patients. The report noted that "Overworked and inappropriately trained staff can result in poorer health outcomes due to incorrect diagnoses and treatment, which in the longer term may result in the need for more expensive treatment options and multiple return visits" (HFG, 2018).

The PER (2019) also noted that sharp increases in HRH costs resulted from unbudgeted overtime expenses as the limited staff available tried to cover the workload. The Health System Review shows the country is still using level determinations established in 2003 to staff facilities, despite significant population and disease burden increases in the ensuing decades. Ultimately, continued high allocation of costs to staff crowd out investments in other essential inputs required for service delivery, including capital costs, technology, and drugs.

Consumption and Investing for the Future

The health sector's expenditure on capital formation remains low and inadequate to meet the growing population, changing distribution, and financing of technology improvements for better diagnoses and treatment. As shown in Table 2 above, from 2015, capital spending declined from 9% to only 4% by 2018. While this reflects the GRN's commitment to reducing expenditure, the capital spending level is potentially inefficient compared with increased staff costs from 41% to 46%. The MoHSS has developed several plans to build new facilities including secondary referral hospitals in Windhoek and refurbishment of Windhoek Central Hospital and Katutura Hospital, however, these plans have remained largely unfunded. The MoHSS has cited major challenges within the two referral hospitals in Windhoek including overcrowding, dilapidated infrastructure amongst others, with refurbishments largely inadequate to meet growing need (Windhoek Express, 2022). As migration patterns increase rural-to-urban movement, further investment in new and expanded facilities is essential. For example, it was noted that Windhoek in the Khomas region has no secondary hospitals owned by the government and patients often move from primary care to tertiary care, resulting in overcrowding and other knock-on inefficiencies

While health care remains labor-intensive, investments in new technology offer opportunities for faster diagnoses and better patient outcomes that can reduce the length of patient hospital stays or time in OPD units. Increased capital spending can help the MoHSS reduce health workers' time attending to the same cases. Across many countries, investments in technology such as telemedicine and mobile clinics offer opportunities to expand services to remote and sparsely populated communities without spending on buildings, which are usually more costly.

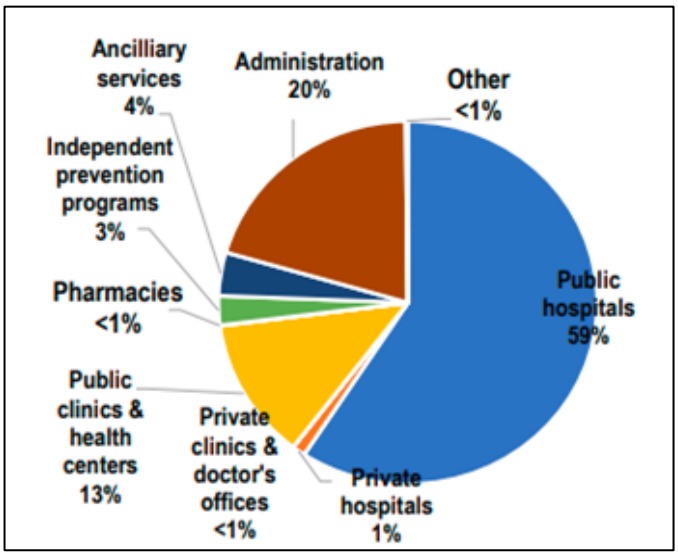
MOHSS Budget Allocations to Health Functions

Though Namibia adopted a primary health care approach as a critical pathway towards achieving UHC, this is not well-reflected in how resources are allocated to its different health-system levels and functions. For example, MoHSS expenditure by program area shows that curative and clinical care services account for the greater proportion of the expenditure compared to other programs. The curative and clinical care services program comprises outpatient and inpatient services for referral and regional hospitals, support for clinical services, and Central Medical Stores' expenditures. The chart below from the 2019 PER shows spending in curative care at 59%, followed by administration at 20%.

Hospital care remains labor-intensive; hence, employment costs account for a significant share of expenditure at the hospital level. The Health System Review showed that over the 2012/13–2020/21 period, employment costs have absorbed more than 60% of the hospital expenditure. Meanwhile, expenditure on pharmaceuticals at the hospital level is minimal, partly because of the procurement centralization of medicine and pharmaceuticals.

Spending on primary care has slowly increased over the last three years to about 13% of total funding, shown in Figure 3 above. However, this is still low, and most community and public-health interventions remain donor-funded, especially for diseases such as HIV, tuberculosis (TB), and malaria. Whilst there are no benchmarks on proportion of health budgets countries must spend at primary care level, declarations such as the Alma Ata continue to emphasis the high return on investments invested at the primary and community level in comparison to more costly tertiary care. Thus, it is essential for the country to critically assess gaps at the primary care level, including the community and channel more resources to address these especially in rural and remote communities.

Figure 3: MoHSS on Health Care Functions



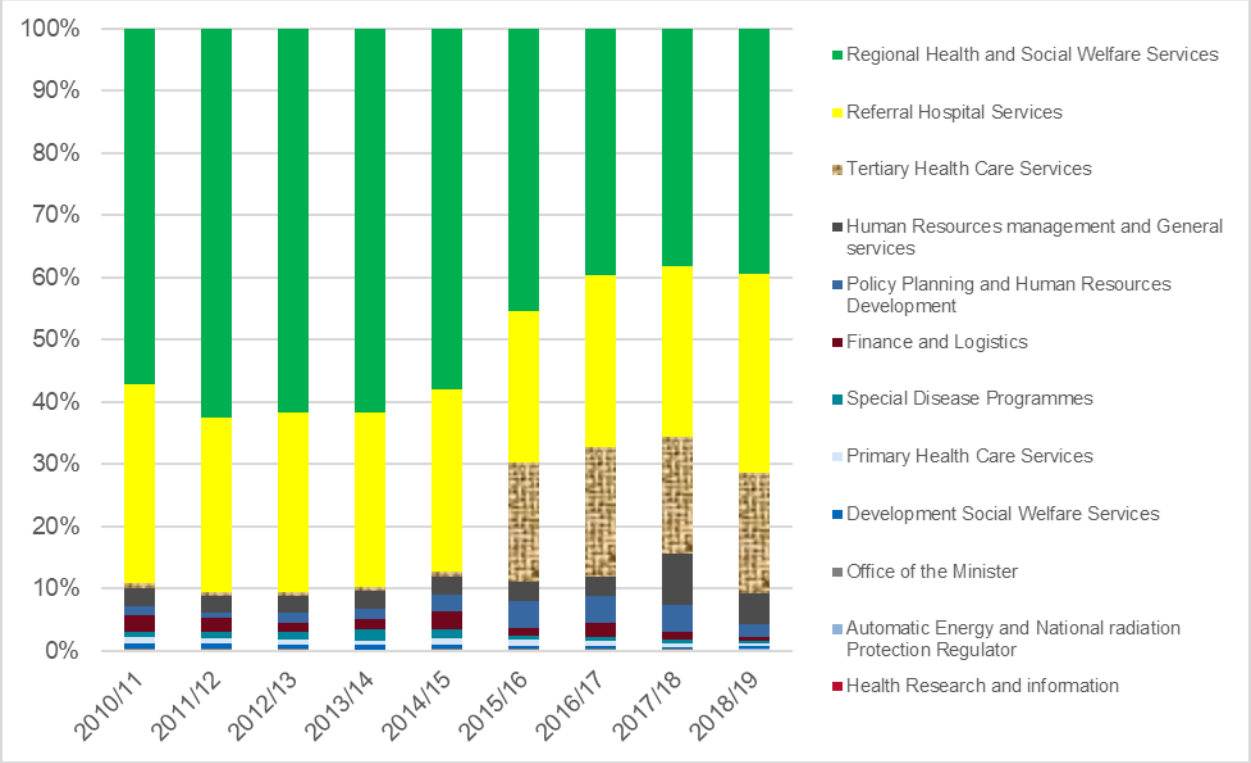
Source: World Bank, Public Expenditure Review for Health, 2019

The 14 regions through the Regional Health and Social Welfare Services directorate receive the largest annual budget allocation, even though this share has declined significantly over the years as shown in Figure 4 below. This allocation includes resources for regional administration, funds for district hospitals and primary care facilities. The second-largest allocation goes to the country's five tertiary hospitals located in Windhoek (2), Oshakati (1), Rundu (1) and Onandjokwe (1), which mainly provide referral services.

The high cost of secondary and tertiary care continues to crowd out primary care and public health-promotion programs. Though primary health care is less costly as it requires basic medicines and low-skilled health workers, it is often overshadowed by the high costs of specialized medical care needed at tertiary hospitals, such as specialist doctors and diagnostic equipment. Furthermore, ruptures in primary care drive patients to seek perceived better-quality care from tertiary hospitals. Additionally, colonial legacies such as the pre-independence, hospital-focused curative model exacerbate this allocative inefficiency. These factors, combined with historical budgeting approaches, continue to motivate larger budget allocations to hospitals.

Attempts to address overcrowding at hospitals often result in more money, health care workers and equipment being "thrown" at hospitals to capacitate them at the expense of primary care. This inherently inefficient approach perpetuates challenges at the tertiary level while neglecting primary care, including health promotion, which is essential to addressing most health needs at low cost.

Figure 4: Composition of MoHSS Expenditures by Program Area



Source: Ministry of Health and Social Services Health Systems Review (2012-2021), 2022

Inequitable Allocations to Regions

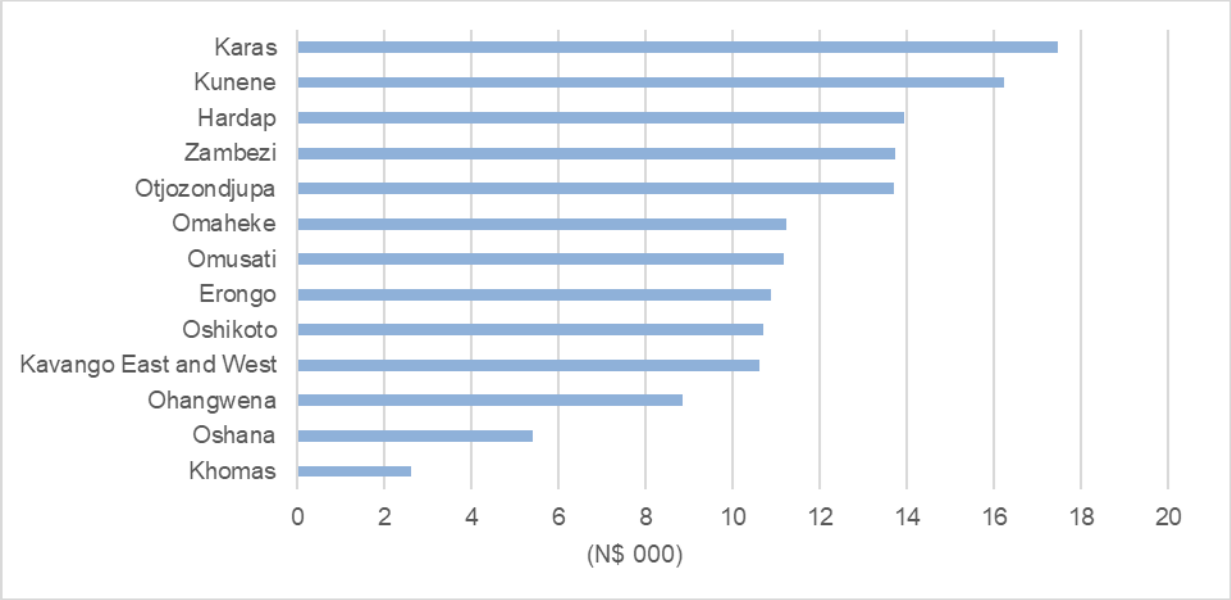
Budgetary allocations to regions remain inequitable and not adequately informed by evidence such as population sizes or disease burdens. The Health System Review noted that despite the large share of budget allocated to regional programs shown in Figure 4 above, there are no specific methods, norms, or rules for regional budget allocations. Ultimately, regional bids are mainly based on 'normative needs' related more to the previous budget allocations than disease burden. Per capita expenditure shows no apparent relationship to regional needs.

The Health System Review noted that although Omusati had the total highest expenditure (N$2,689,545,817), it had low per capita (N$11,177) spending compared to Karas (at N$17,457 per capita and total expenditure of N$1,406,331,963). Khomas region has the highest population and has the lowest per capita expenditure (N$ 2,607 per person); however, this may be higher if data from the two central hospitals—which also serve as district hospitals for the region—are included (accounted for separately under the tertiary hospital services budget). Such variations between population and allocations show only one metric for assessing the equity of the allocations to regions. Further analysis utilizing disease burden, poverty, and other factors may support different outlooks. Figure 5 below shows the variations in per capita expenditure for the various regions.

Analysis conducted in 2012 when the MoHSS attempted to develop a resource-allocation formula shows inequitable and inefficient allocation to regions. The current allocation approach does not consider the different contexts, development goals, and other criteria such as equity, population, or disease burden. Overall, the allocation appears arbitrary, showing the need for an explicit approach to guide how regions allocate resources. Thus, a resource-allocation formula

that provides clear objectives and independent criteria are required to maximize health outcomes for the country. Such a formula will enable the MoHSS to apply different weighting to criteria at each budget cycle and adjust allocations in a responsive approach as regional conditions, government goals, and population dynamics change.

Figure 5: Per Capital Expenditure (2012/13-2020/21)



Source: Ministry of Health and Social Services Health Systems Review (2012-2021), 2022

Allocations to Disease Programs

The annual government budget does not provide enough detail on allocations to various disease areas; however, total health-sector funding favors infectious diseases based on the Resource Tracking (2017/18) report. Emerging data show NCDs are increasingly becoming among Namibia's most significant burden drivers yet remain underfunded and under provided. An assessment on the implementation of the 2014 District Health Services package conducted in 2022 to inform revision of the EHSP showed that NCDs were amongst the top under provided services at district and primary care facilities. The report highlighted inadequate training for health care workers on providing NCD diagnoses and treatment, shortages of essential drugs required and specialist services for advanced care were only available in Windhoek.

As the largest funder of health in Namibia—contributing over 62% of the total funding in 2017/2018—the GRN's allocation patterns to disease areas have the strongest impact, even in the presence of other funders. NCDs accounted for 33% of GRN health expenditures, with infectious and parasitic diseases accounting for 38%, and reproductive health accounting for 10%. Expenditure for reproductive health declined sharply from 38% in 2012/13 to 10% in 2017/18. HIV/AIDS remains the largest driver of spending within infectious disease areas, consuming 64% of the total expenditure on communicable diseases, as reported by the Resource Tracking exercise on health and HIV spending of 2017/18. Of this expenditure, the central government contributed 61%, bilateral and multi-lateral donors contributed 33%, domestic corporations contributed 4%, and households contributed 2%.

The government predominantly funds anti-retroviral treatment (ART), while donors predominantly fund preventive care. Data from the Resource Tracking of health and HIV

expenditures for 2017/18 showed that an estimated 74% of total HIV/AIDS expenditures went towards care and treatment; ART consumed the bulk of funds, and HIV testing and counseling consumed an estimated 10%. The ART expenditures were predominantly funded by the GRN, which provided an estimated 63% of the total ART expenditures. Prevention programs consumed 9%—predominantly funded by external partners who provided an estimated 89% of the total prevention expenditures.

Namibia's spending pattern for diseases continues to mirror a global trend where budgetary and allocation decisions are less responsive to evidence of NCDs remaining underfunded. As treatment approaches and availability of different ART regimens have improved, NCDs are becoming a significant cause of morbidity and mortality across the general population and even more pronounced in people living with HIV; Cervical cancer has been noted as one of the leading cancers in people living with HIV. Additionally, as PLHIV are getting older, countries will soon need to address an aging population on ARVs that will have increased likelihood of renal complications and other NCD-related expressions. The COVID-19 pandemic also increased the risk of death in patients with NCDs, such as hypertension and diabetes. Despite NCDs contributing to over 30% of total deaths annually and continuing to rise in Namibia and other countries, resource allocation from governments and donors remains in favor of HIV/AIDS. Furthermore, disease-specific spending has created silos that leave many health systems less resilient and exposed to shocks such as pandemics, natural disasters, and human conflict. This evidence points to a need to critically review disease-specific investments, diversify allocations to respond to emerging threats, and create robust health systems that deliver adequate, appropriate, and responsive patient care.

Recommendations

The country has made significant progress in addressing the health needs of its population. Across the Southern African Development Community region, Namibia has one of the highest budgetary allocations to health, consistently meeting the Abuja Declaration. However, as shown above, more money for health has not adequately led to more health. Though the country has achieved good progress in some areas when measured against other UMICs—especially in the fight against HIV/AIDS—the country has regressed significantly in maternal and child health care. The discussion above demonstrates potential inefficiencies where the country can do better if it reforms the way budgetary resources are allocated. Allocative efficiencies do not result in more resources becoming available, but rather, enable the government to achieve better health outcomes at the same level of spending.

The MoHSS has embarked on a process to galvanize stakeholders towards making progress on the UHC pathway through developing a policy and implementation plan. The policy will identify opportunities and gaps in current service delivery and potential assets to be leveraged by the country to progress to UHC within its current context. One of the critical areas to be examined during this process is health financing—focusing on increasing domestic funding and ensuring value for money for available resources. This analysis will provide a starting point to catalyze discussions on how to improve efficiencies in the allocation of resources. Based on the analysis above, the following recommendations are presented as potential interventions and opportunities to unlock more health for money within the health sector in Namibia.

The following reform options are presented as potential actions that can improve resource allocation within the MoHSS budget:

- Strengthen the engagement and relationship between MoHSS and MoF to improve health-allocation alignment with national priorities. This will include ensuring active participation of MoF in key decision-making platforms for health, such as UHC Technical Working Groups, annual planning meetings and strategy development, and strengthening other routine direct engagement at technical and policy levels between the two ministries.
- Fully implement PBB while moving away from the current presentational framework and toward outcomes and performance-driven budgeting. This will include increased engagement of directorates, units, individual programs, and regions to outline performance goals that are fully reflected in the budget.
- Provide more autonomy to budget holders at national and subnational levels, moving away from line-item budgeting as part of the comprehensive PBB reform. This will enable budget holders to be flexible on how and where to spend the limited resources available responsive to program and facility priorities.
- Develop a resource-allocation formula to provide objective, independent criteria closely aligned with national priorities and health needs as a basis for budgeting resources to promote a more equitable allocation. Such a formula should guide resource allocation to disease areas, health care functions, levels of care, and different regions.
- Lobby for timely and predictable disbursement of funds from the MoF to reduce ad hoc and accrual spending. This should also include streamlining the disbursement process to the subnational level to ensure they are timely.
- Engage the MoF for the development of a framework to enable tertiary care facilities to retain and use funds collected directly without remitting these to the Treasury. Such funds will provide a buffer to counter disbursement delays from the national level and allow for greater budget autonomy—allowing facilities to be responsive to changing health needs and

service provision. Furthermore, the management of revenue at the local level may improve efficiency in collecting such funds. As part of this process, strong capacity development should be included to build autonomy and skills for effective resource allocation, management, and prioritization at subnational levels.

- Engage the NPC and MoF in increasing spending on capital budgets as a critical driver to continued investment in infrastructure and equipment required for equitable quality health services. This should include developing a long-term infrastructure plan linked to population growth, disease trends, and technological advances in the health sector.
- Strengthen HRH management and deployment within the MoHSS to control the cost of the health workforce, the health sector's most significant cost driver. This will include developing the capacity of regional managers to make HRH planning and management decisions, use HRH systems data, and fully understand HRH practices' impact on regional and national health expenditure. At planning level, HRH requirements should be aligned to the EHSP with adequate workforce planning and development including training, recruitment, deployment, remuneration and retention amongst others.

These recommendations are not listed in any order of priority and can be tackled based on stakeholder appetite and the complexity of reforms required. Some interventions require buy-in from other line ministries and action from policy-level decision makers, while others can be tackled within the MoHSS. This provides the MoHSS with a range of potential interventions, including ways to address inefficiencies in resource allocation that are “low-hanging fruits”.

Conclusion

Namibia has committed to providing adequate, affordable, and equitable health services to its population as part of its sustainable development goals and national strategic plans. The country recognizes that achieving this task will require tough decisions on “how much to spend”, “where to spend”, and “on what to spend”, including tradeoffs. Recognizing allocative efficiency as a critical frontier to distributing limited resources is crucial in this decision-making process. Identifying potential areas where the country can further improve resource allocation and utilization will help streamline discussions and assist decision makers to agree on concrete steps required.

This analysis provides a starting point by identifying current gaps and offering possible solutions. However, it is not exhaustive, as allocation decisions occur across all health-system components, including HRH, medicines, information systems, and facilities. Different instruments of analysis are available to examine the health system’s various parts to assist decision makers in making more effective allocations. However, financial allocative efficiencies should not be addressed in isolation but as part of a broad effort that includes further analysis and engagement of key stakeholders to explore potential efficiencies in other health-system components. Furthermore, while financial efficiency is critical, it should always be considered within the context of the broader health system goals of “providing adequate, affordable and equitable, quality health services.” The on-going UHC reform process provides a unique window of opportunity for the country to mobilize political and technical support towards addressing inefficiencies as it seeks to progress towards attainment of UHC.

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