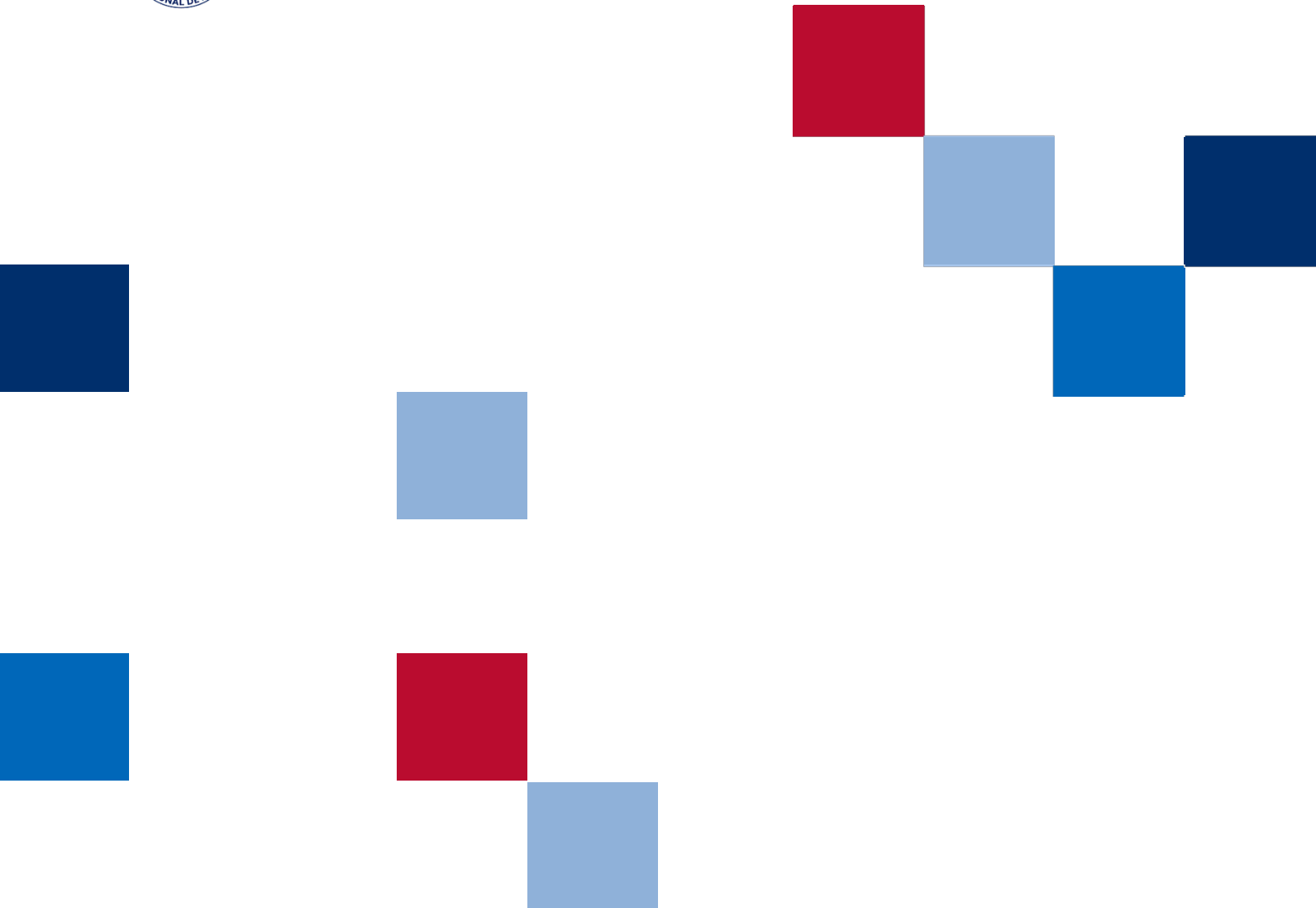




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Process Guide for Routine Budgetary Resource Allocation for Health in Namibia

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

DHIS	District Health Information Software
EHSP	Essential Health Service Package
HRH	Human Resources for Health
LHSS	Local Health System Sustainability Project
MoF	Ministry of Finance
MoHSS	Ministry of Health and Social Services
MTEF	Medium-Term Expenditure Framework
PBB	Program-Based Budgeting
PER	Public Expenditure Review
TWG	Technical Working Group
UHC	Universal Health Coverage

Introduction

The Government of the Republic of Namibia is constitutionally mandated to deliver essential health services that are of high quality, affordable and accessible to the population in line with government goals to accelerate progress towards attainment of good health and well-being. To achieve this mandate and attain universal health coverage (UHC) will require increasing the resources available for health care delivery while ensuring the efficient allocation and utilization of available resources. Namibia's Ministry of Health and Social Services (MoHSS) has established UHC governance structures, including the UHC technical unit responsible for overall operational coordination and Technical Working Groups (TWG) to lead the various technical components, and has given it a broad mandate for developing the evidence-based reforms needed to achieve UHC through multi-stakeholder engagement.¹ The UHC technical unit (in coordination with the Health Financing TWG) will, among other activities, explore how the government can raise revenue for health, pool and allocate these resources, and purchase essential health services for the population. As the government is the largest funder of health (over 60 percent of total health expenditure) (World Bank 2019), changes to how the domestic budget is allocated to health services can significantly affect access and affordability of quality health services. This process guide outlines potential steps and approaches the MoHSS can take to enhance allocative efficiency within the domestic health budget.

The World Health Organization defines allocative efficiency as allocating resources to optimize the mix of goods and services that maximizes the benefits to society (Chisholm and Evans, 2010). Allocative efficiency in health care optimizes health services provided within the available budget envelope. It also extends to decisions on which level of care and which geographic regions should provide these services. Allocative efficiencies affect equity because decisions on what interventions are purchased and where they are delivered will determine who gets their needs met, at what cost, and how easily they can access these services. By ensuring that facilities are allocated enough resources and have adequate capacity to make informed decisions on budgeting and service delivery, the country can improve the availability of essential health services, reduce implicit rationing, and protect patients from high out-of-pocket spending.

Achieving allocative efficiency involves moving away from the traditional budget allocation approach and shifting how policy makers, budget holders, and the surrounding ecosystem think. This shift includes deliberate decisions on the mix of interventions funded and a move from passive to active allocation decisions at all levels of the health care system. Furthermore, building the capacity of budget holders to absorb available resources and make prioritization decisions at the local level to ensure responsiveness to utilization patterns and needs is essential to improving efficiency in the allocation and utilization of budgetary resources.

Namibia has started a comprehensive reform process to define the country's UHC policy framework. This process will outline UHC objectives, principles, and targets based on the country context. Using a health systems strengthening lens the government will identify interventions to support the health system, build resilience, and guarantee people's financial protection when seeking services. As part of this ongoing reform, the UHC technical unit is defining an essential health service package (EHSP) to be guaranteed as a minimum benefit for all citizens. The UHC technical unit will also develop reforms across financing, human

¹ The UHC governance structures bring together government ministries and agencies, private sector entities including health providers and insurers, regulators, and other entities under a single platform with technical working groups structured along the seven pillars of the World Health Organization's Health Systems building blocks.

resources, infrastructure, essential medicines, and all other components needed to ensure affordable and equitable access to this package of services. Allocative decisions discussed in this process guide focus on how the country can ensure that currently available and future resources are allocated in line with the EHSP and other relevant financing reforms to generate and pool resources and purchase the defined package efficiently.

Through the UHC technical unit, the MoHSS has started developing and synthesizing evidence to inform the broad range of reforms required across the health systems building blocks, including financing. Early results from stakeholder consultations suggest their agreement on the need for allocative efficiency. To support the process of synthesizing evidence, this guide contains recommendations from the Local Health System Sustainability Project (LHSS) that the MoHSS and the UHC technical unit can explore.

This process guide outlines an iterative process to support budgetary allocation decisions aligned with regional populations and needs as prioritized in the EHSP. The process guide proposes a broad decision-making framework that can be used to review current practices and move toward more efficient approaches in resource allocation. Contextualization and alignment with other reforms increases the likelihood of an efficient system; hence, the process guide suggests steps instead of prescribing reforms. The guide proposes allocating resources through the use of regional population-based resource estimates and the EHSP, which ideally will allocate financial resources to regions in a way that is more closely aligned to their needs than do the historical approaches that are used now.

The process guide limits itself to allocation decisions for financial resources during budgeting. It does not cover how the MoHSS can allocate other resources such as essential medicines and human resources for health (HRH). Through the on-going UHC reform process, other reforms required to address allocative efficiencies across the different health system components will be developed, with adequate link to the budgetary processes proposed in this guide.

Budgetary Allocative Inefficiencies in Health

Namibia consistently spends nearly 15 percent of its government budget on health, in line with the Abuja Declaration. Yet, it has failed to achieve the anticipated health outcomes that other upper-middle-income countries do with comparable health spending (World Bank 2019). An analysis of allocative efficiencies conducted in 2022, which synthesized evidence from different studies done in the country over the past few years, highlighted several potential inefficiencies the government needs to address to unlock value for money in health spending (LHSS 2022). The report identified inefficiencies across the budgeting cycle from formulation to execution, monitoring, and reporting, as summarized below.

1. **Incomplete implementation of Program-based budgeting (PBB) reforms within MoHSS:** The MoHSS has robust procedures to guide budget allocation; however, reforms to implement these procedures, including the transition from line item to PBB, remain incomplete. While the health budget is presented under the PBB headings, actual spending and tracking still follow a line-item approach with no practical implementation of performance monitoring linked to inputs as required by PBB. This has been mainly due to limited technical capacity and political commitment within the MoHSS and Ministry of Finance (MoF) (MoHSS 2022).
2. **Misalignment between budget formulation and policy imperatives:** The disconnect between the costed national health strategy, Medium-Term Expenditure



Framework (MTEF), and annual health budgets points to low levels of alignment between actual budgets and national plans. The MoHSS developed a costed national plan in 2017; however, there is limited evidence that this was used to inform resource allocation. Similarly, the 2014 EHSP sets out services to be provided from the secondary level downward, but there is no linkage between this package of services and resources provided by the MoF during annual budgeting or disbursed from the national level to health facilities within the MoHSS.

3. **Predictability in budget disbursements within MoHSS:** Low predictability in budget disbursements of funds from the national MoHSS level results in budget holders making inefficient spending decisions, prioritizing goods and services that can be procured through credit over those requiring cash on hand. Within the MoHSS, this has resulted in the growth of unbudgeted and unpaid invoices at the end of each year (accruals), with health contributing almost 13 percent of total government accruals (7.4 percent of the yearly MoHSS expenditures) based on the 2019 Public Expenditure Review (PER) report, with most of these being off-budget spending on staff overtime, laboratory tests (especially with the National Institute of Pathology), and referrals to the private sector.
4. **Limited autonomy of subnational budget holders:** As noted in the 2019 PER report, facilities and regions have limited autonomy and financial management capacity, effectively limiting their ability to make flexible and context-responsive allocation and spending decisions. The most significant proportion of allocations to the subnational levels is controlled at the national level, including human resources and essential medicines, leaving subnational-level budget holders with small budgets and no autonomy to direct resources toward their priorities. Furthermore, implementation of the decentralization process is slow and not accompanied by initiatives to build the capacity of subnational levels to improve allocation and absorption capacity.
5. **Inefficient allocations across essential inputs for health service delivery:** Funding for health worker costs, including salaries and other allowances, has crowded out spending on other essential inputs. Between 2015 and 2018, health worker costs grew by over 7 percent, while spending on essential medicines and capital declined. This has been attributed to cost creep due to inefficient HRH practices, including inadequate training, unbudgeted overtime, and health worker burnout.
6. **Inefficient allocations to levels of the health system:** While the country adopted a primary health care approach to the delivery of essential health services, this has not been reflected in resource allocation. Curative care at the hospital level absorbs over 59 percent of the total budget against 13 percent for primary care. High allocation to tertiary care at the expense of low-cost, high-impact primary care interventions may lead to higher overall spending and poorer health outcomes (MoHSS 2022).
7. **Low use of evidence to inform regional budget allocations:** Allocations to regions remain inadequate and inequitable. They are based on historical budgets with no bearing on needs and other context-specific factors faced by each region. The MoHSS's Health Sector Review (MoHSS 2022) noted that health facilities in heavily populated regions like Khomas are usually highly utilized and overcrowded, while facilities in less populous regions like Karas, Kunene, and Hardap are less utilized but receive high per capita allocations. However, there is no explicit attempt within budgeting to address these imbalances and provide more resources to high-population regions.

These potential inefficiencies are not exhaustive but provide a starting point for analyzing the allocation of health sector resources. As suggested in this guidance, a detailed review and further stakeholder engagement, especially with the MoHSS and MoF, are needed to unpack these challenges further, identify root causes, and develop practical steps to address these gaps. In 2022 and 2023, LHSS and WHO will provide technical support to the MoHSS to unpack potential inefficiencies in budgeting (including program-based budgeting) and, public financial management. This will include building consensus on root causes for challenges noted and co-creating solutions to address these gaps with relevant stakeholders within the MoHSS and MoF. Nevertheless, the analysis recommended several reform options, outlined below.

Addressing the challenges outlined above requires a broad multisectoral approach with political and technical support to ensure reforms are comprehensive, well designed, and systemic. The budgetary process should be well linked to other health planning systems, and any reforms must consider proposed changes across different components of health systems strengthening. For example, evaluating the responsiveness and appropriateness of budgets requires data on needs, service utilization, and health outcomes, which are only available if adequate and timely monitoring and evaluation systems are in place. Furthermore, providing sufficient funding for health service delivery units without improving absorption capacity through investments in administrative capacity will only result in high unspent funds, which may jeopardize future funding. Hence a systems approach that embraces the complexity of the context, including process connections and the different needs of multiple stakeholders, is required to diagnose and address the potential inefficiencies identified.

The following options are presented as potential actions that can improve resource allocation within the MoHSS budget, mainly through strengthening engagement with the MoF and capacitating subnational levels to enhance resource allocation. At the national level, the Health System Review (2022) points to weaknesses in the relationship and engagement between the MoHSS and MoF as potential causes of inefficiencies, especially at the budget planning stage. The recommendations presented below provide a starting point for discussion and strengthening the relationship between the two ministries. Furthermore, implementation of PBB is central in providing an evidence-based approach to such discussions.

- **Strengthen the engagement and relationship between the MoHSS and MoF to improve health-allocation alignment with national priorities.** This will include ensuring active participation of the MoF in key decision-making platforms for health, such as the UHC governance structures, annual planning meetings and strategy development, and strengthening other routine direct engagement at technical and policy levels between the two ministries. Such constant dialogue will ensure transparency in resource allocation and spending decisions in both ministries and resolve barriers/misconceptions to effective co-planning. Within the MoHSS, changes to allocation processes should also include streamlining the disbursement process to the subnational level to ensure financial resources are timely, adequate, and responsive to local needs.
- **Engage the National Planning Commission 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.
- **Fully implement PBB and move away from the current line-item budgeting framework toward outcomes and performance-driven budgeting.** This includes fully understanding factors hindering full implementation over the last 10 or more years, mobilizing political commitment within MoHSS and MoF leadership to



implement this budgeting approach fully, and creating adequate linkage to performance goals that are fully reflected in the budget. PBB reforms should expand to 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 in a way that is responsive to program and facility priorities.

- **Develop a resource-allocation formula informed by objective criteria such as disease burden and national priorities** to promote a more equitable budgetary allocation. Such a formula should guide resource allocation to disease areas, health care functions, levels of care, and different regions, among other equity considerations.

At the subnational level, the PER (World Bank 2019) and the Health System Review (MoHSS 2022) suggest that limited autonomy to make local decisions may be the root cause of inefficiencies. This may, in part, be a result of a limited envelope under the control of the facility and regional managers and limited capacity at this level to make budgetary allocation decisions. Addressing this and other gaps noted above may improve allocative efficiencies at the subnational level and enhance service delivery. The following actions are a starting point in addressing subnational gaps in the budgetary cycle:

- **Engage the MoF in developing 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, managing revenue at the local level may improve efficiency in collecting such funds. Capacity development should be included in this process to build skills for effective resource allocation, management, and prioritization at subnational levels.
- **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.

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 quick wins.

In the following sections, this process guide proposes focusing on how available budgetary resources can best be allocated to address potential inefficiencies and inequities arising from using historical estimates during planning. Decisions on regional allocation of resources are made by the MoHSS and require the minimal engagement of external stakeholders such as the MoF. Furthermore, the proposed approaches are aligned with ongoing reforms, including PBB and the EHSP currently under development as part of the UHC process.



Addressing Allocative Inefficiencies in Health

How resources are allocated in a health system dramatically affects a country's progress toward UHC, especially in improving equitable and affordable access to health services. Improving resource allocation ensures that the health sector produces the "right services, at the right place in the right way" (allocative and technical efficiency) (UHC Financing Forum Technical Working Group, 2017). Addressing allocative inefficiencies during budget development can improve the supply of health services at facilities. Without using data and evidence to align resource allocation to the goals of UHC, services may remain underprovided, of poor quality, and largely inaccessible to those who need them. Addressing inefficiencies is a complex task that requires a systemic and sector wide approach to ensure unintended negative consequences do not arise because of a policy change. For example, providing more resources to facilities without improving their capacity to manage and absorb those resources will likely result in inappropriate expenditures or unspent budgets, which would reflect poorly on the sector and probably prevent future budget increases for health. The process outlined below is iterative and ensures all stakeholders within the health budgeting and planning ecosystem are engaged and buy into any changes to allocation approaches.

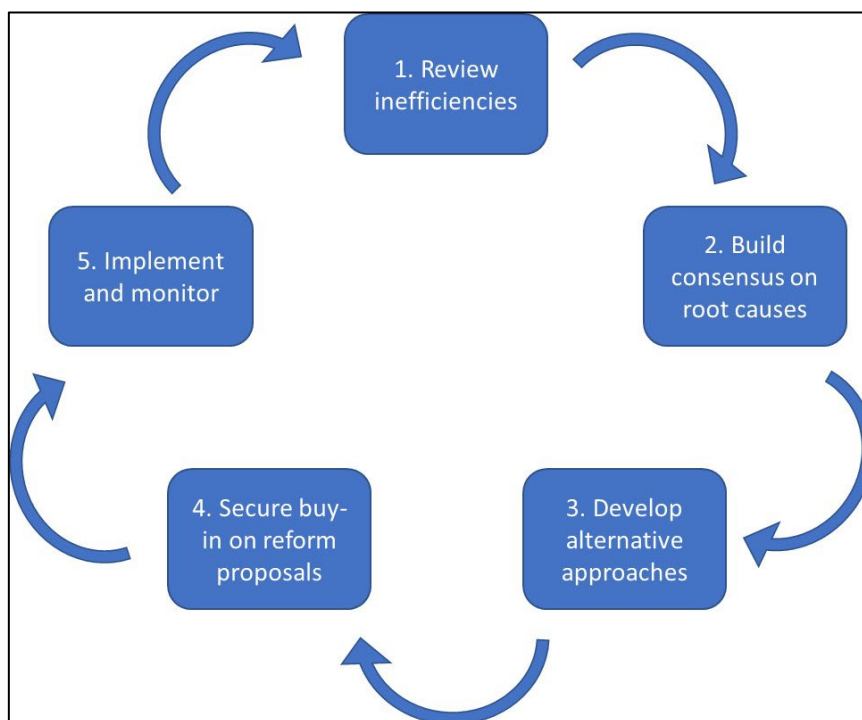
Process for addressing allocative inefficiencies

The summary of potential inefficiencies identified in the Analysis of allocative inefficiencies on the Health Sector Budget in Namibia (LHSS, 2022) report and synthesized above offers a starting point for reform discussion. Still, it may not be comprehensive enough to inform and galvanize action. More examination of the gaps and potential opportunities is required, including a high-level political economy analysis to determine feasible reforms that stakeholders are likely to buy into. To ensure the right causes of inefficiencies are addressed, a comprehensive multi-factor analysis is required with "cause and effect" scenarios to identify the best starting points and reform instruments. Furthermore, identifying the right sequence of reforms is needed, based on a set of criteria to be developed by the country.

The potential inefficiencies in resource allocation point to the need for additional work to develop explicit approaches to budgeting and allocating resources to regions to enhance equity and adequate funding in line with each region's unique needs. To ensure this, we propose the steps illustrated in Figure 1 and discussed below as starting points for further reform.



Figure 1: Process Flow to Address Allocative Inefficiencies



Step 1: Present, discuss, and review of the potential inefficiencies identified; unpack the impact of each inefficiency based on the country's UHC goals. The inefficiencies identified are based on existing literature on the Namibian health system, some of it outdated; hence a more detailed examination is required. Furthermore, benchmarks on how much is allocated to which areas that are based on regional and international studies may not be the best measurement approach for Namibia. For example, a 2016 analysis by the World Health Organization showed wide variations in UHC performance across countries with similar levels of spending, with some countries spending less per capita than others but performing much better on UHC indicators (Jowett et al. 2016). Thus, potential inefficiencies will need to be further unpacked, and their impact on the country's progress to UHC fully examined, bearing in mind Namibia's unique geographical and socioeconomic context.

Step 2: Conduct multi-stakeholder discussion of the potential inefficiencies identified; build consensus on root causes. At this level, it is essential to separate symptoms of system failures from actual system failures. Where inefficiencies and challenges have more than one cause, such system linkages will need to be analyzed. This will ensure any change to allocation decisions addresses the root causes and not just the most visible symptoms. The MoHSS may use various root cause analysis tools in the process. Consensus by stakeholders, including budget holders, implementers, and policy makers, is also needed on the root causes identified.

Step 3: Develop and review alternative approaches to address potential inefficiencies. These options should be guided by the detailed situational analysis conducted in steps 1 and 2. Furthermore, the MoHSS can also do a high-level political economy analysis to identify critical actors, resisters, enablers, and veto decision makers whose influence and interest in addressing potential inefficiencies will be required. Such an analysis includes the UHC governance structures and its subgroups on Health Financing, Essential Health Services, and HRH, among others. The Health Financing TWG can be a central pillar to lead the discussion and link allocative efficiency discussions to broader reforms on revenue generation, pooling, and purchasing. For each inefficiency identified, there may be more than one solution to address it. These may need to be evaluated against criteria, such as the

potential for buy-in, initial investment, and synergy with other health system reforms. Ensuring each reform is linked to the broader UHC agenda and ongoing interventions is essential. The following steps present two potential approaches for improving the alignment of resource allocation with regional needs and the EHSP.

Step 4: Obtain buy-in and approval for the most feasible and practical solution based on the situational analysis and stakeholder consensus. The potential solutions will differ in complexity, level, and timeframe required to implement them. Solutions to address inefficiencies can be sequenced to address successive challenges and ensure room to monitor and undertake corrective action. Furthermore, multiple potential solutions may be identified, with some requiring incremental changes to current processes and others requiring complex and long-term system changes/reforms. In such scenarios, the MoHSS can start by implementing short-term gradual changes while building capacity and momentum for more extensive and complex system reforms.

Step 5: Implement reforms and monitor impact at the unit and system level. Once approval to implement reforms is obtained from policy makers, implementation of proposed approaches will require commitment from senior leadership within the MoHSS, with clear communication and setting of targets that are to be achieved. Changes in resource allocation may result in perceptions of loss, especially among some units/regions where resources decline, so this will require a deliberate change management approach within the MoHSS. For sustained change, building capacity of technical and managerial levels will strengthen buy-in required for long term success. Throughout the implementation of the reforms, there is a need to continuously monitor, adjust, and reflect on the best approaches, and make modifications where necessary. Monitoring and evaluation will ensure course-correction where changes are not producing the intended results with lessons learnt applied to modify future allocation approaches. It is critical to ensure the impact on the whole system is observed, including tracking the expected effects on UHC outcomes and goals.

The steps presented above provide a summary process guide that the MoHSS can follow as it explores different approaches to address potential inefficiencies in allocating and utilizing available funding as part of the activities under the UHC governance structures to catalyze progress toward UHC. The proposed steps are neither rigid nor final but present a structured approach to ensure well-thought-out and integrated reforms. The following section offers two strategies to address the inequitable distribution of resources to regions and the lack of an evidence-informed process to allocate resources.

Potential options to address allocative inefficiencies in the health sector

The analysis of potential inefficiencies in resource allocation showed many opportunities for the MoHSS to implement quick-win changes to improve resource allocation and increase value for money while also addressing inequities in access to health care. This includes realigning resource allocation to regions in line with factors affecting needs such as population, disease burden, and national program goals. Regional budgets and bids to the MoF are primarily based on historical budgets instead of realistic estimates of. As a result, allocations show no apparent relationship to regional population, access gaps, equity, or program goals. While some regions face pressure from high utilization and overcrowding in facilities, other regions have very low facility utilization, yet there is no visible attempt to understand and then address such gaps through budgetary resource allocations.

The MoHSS has outlined a broad vision to make progress toward achieving its UHC goals. These goals include improving equity in access to care, expanding the basic service package, and enhancing financial protection through sustainable financing. As one of the critical reforms led by the UHC technical unit and the EHSP TWG, the country is redefining an essential

package from the community to the tertiary level. The redefined EHSP will be central to defining other health systems reforms necessary to ensure this package is affordable, accessible, and equitable. The MoHSS will also ensure the EHSP is costed, providing valuable data on resource estimates required to deliver each intervention in the package, and a starting point for budgetary decisions.

Development of the EHSP provides a solid starting point from which to reform budgetary resource allocation in line with evidence and national goals. The EHSP will clearly define "what services are required, where and how these services are to be provided." Ensuring that the allocation of financial budgets aligns with this package is a first step toward guaranteeing an adequate supply of affordable services. To ensure allocation is equitable, population data and disease prevalence and incidence estimates should inform actual/predicted needs per region. These reforms offer a path toward the least political resistance to address the multiple challenges identified through linking money to service delivery. Other broader public financial management reforms to improve absorption and utilization capacity should be implemented as the next phase of the reform process. Moreover, since the country is already implementing PBB reforms, the proposed alignment of budgeting to actual health service provision is crucial to determining programmatic needs, especially for facilities, regions, and tertiary institutions.

Option 1, regional population allocation, and option 2, allocation using the EHSP, described below, are different processes that can be explored and adopted by the MoHSS to enhance the equitable and responsive allocation of budgetary funding to regions. While other aspects are essential to improve equity in service delivery, such as the allocation of medicines, equipment, and HRH, the proposed process outlined below is limited to financial allocations during budgeting. Furthermore, there is no best approach to ensure equity in resource allocation, and different methods can be adopted. Two alternative processes are proposed below, with the ultimate path to be decided through inclusive and contextual consultation by the MoHSS, the MOF, and other stakeholders, including regional directorates.

Option 1: Allocate resources to regions based on population

Population density and distribution in each region are typical metrics that can be used to determine the level of health needs and the level of financial resources required to provide quality, affordable, and accessible health services. Populous areas, such as Khomas, are usually associated with higher service demand than are less densely populated areas, and generally have longer waiting times and overcrowding (MoHSS 2022). However, the MoHSS currently does not explicitly use population data to inform resource allocation during budgetary processes. At a high level, population estimates per region can inform the overall budget allocations across the different regions. Disaggregation of population data can further inform allocation to specific program areas within each district. For example, if gender-disaggregated data are available, estimates of women of childbearing age in a community can form a starting point for allocating funding to maternal health.

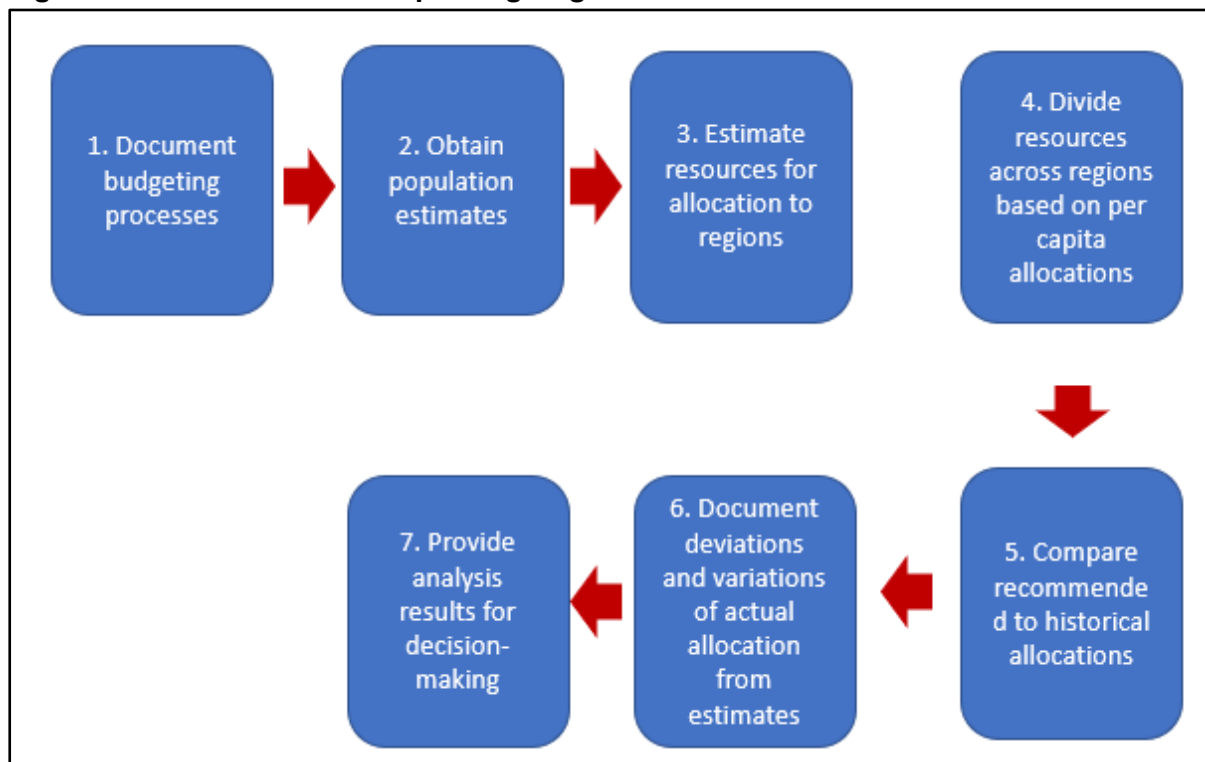
The proposed allocation of resources will factor in the per capita distribution of the flexible budget available to regions and ensure regions with significant populations receive more funding than less populated regions. This use of population data without other evidence on the burden of disease, density, and distances to facilities is not a panacea for addressing equity in resource allocation. However, without skills and detailed data on other equity indicators, this basic approach can stimulate more discussion and consciousness on using a "need-based approach" to resource allocation. Namibia has a rudimentary and still evolving health information system, making it difficult for planners to obtain disaggregated data on other indicators, whereas population data are widely available. For a refined budgeting process, more data on utilization, disease burden, equity and other barriers to effective care will be required. This will need to be collected through routine HIS, ad hoc and periodic population surveys such as Demographic Health Surveys, and National Health Accounts. Currently such



data is limited and usually outdated. The formula can be adjusted to accommodate more variables (such as subpopulation groups, gender, ethnicity, and people living with disabilities) as the country develops more technical capacity to produce data required for more nuanced regional allocations.

The process outlined in Figure 2 and discussed below is proposed as an approach for the MoHSS to allocate budgetary resources to regions using per capita estimates.

Figure 2: Process Flow on Improving Regional Resource Allocation



- 1. Review and document any current use of population data in budgetary resource allocation** by the MoF and MoHSS. This will include a review of available budgeting manuals and discussions with different units involved in the budgetary process within these two ministries. It also will include documenting the country's budgeting process to understand better decision points for prioritization and allocation including how the MTEF plan is developed, amended, and adjusted to reflect new macroeconomic expectations. At the MoHSS, document the budgetary cycle starting from the lowest unit involved in the budget formulation until budget bids are submitted to the MoF or estimates are adjusted according to the budget ceilings/envelopes provided by the MoF.
- 2. Identify and obtain population data required to inform regional estimates**, including data from the most recent census, regional planning estimates, seasonal migration estimates, and other data available from different ministries. This will ensure robust population estimates closely match each region's reality. The regional forecast can be adjusted where possible to factor catchment areas for one region on health service delivery that lies in other regions' administrative boundaries, especially where there are high cross-regional utilization patterns.
- 3. Obtain estimates of resources available for distribution to regions.** This can be obtained from the MTEF or can be provided by the MoF, where there is reasonable evidence that these may vary from those contained in the MTEF.



4. **Divide the available resources by the total population** (obtain national per capita allocation) and then multiply the per capita figure by the population of each region to get the total estimate allocatable to each region (to obtain the regional budget).
5. **Compare the resulting estimates with historical allocations** and assess the impact of using the population estimate compared to the historical expenditure approach.
6. Where **actual allocations differ from estimates** obtained from the per capita formula, **document the extent, nature, and rationale for such variations** and monitor how this will affect equity.
7. **Provide analysis results to the Health Financing TWG and Budget Committees** for review and use during the budget allocation. The Budget Committees and Finance Directorate will review the evidence presented and reflect the re-allocation in the next budget cycle or mid-term budgetary review period if there is buy-in.

Allocation of resources to regions based on per capita estimates ignores the ability of regions to absorb and use such resources. The regional population-based allocation also fails to consider variations in costs of providing care in each region due to other factors such as population density, the region's size, and residents' physical access to health services. Such variations may need to be adjusted outside of the main formula if data are available. Furthermore, regional directorates will need to be included in the process and may need to validate the resulting estimates. Assessments and continuous monitoring of absorption capacity and barriers to effective resource utilization will need to be conducted. Furthermore, where other extenuating factors, such as geographical access and the high cost of services in certain regions, are known, these may need to be adjusted separately. The approach detailed above is a simple formula that ignores many essential factors relevant to allocative equity but provides a stimulant for further evidence-based discussion and can be modified periodically as new data, evidence, skills, and capacity are available within the MoHSS.

Option 2: Align resource allocation to the EHSP

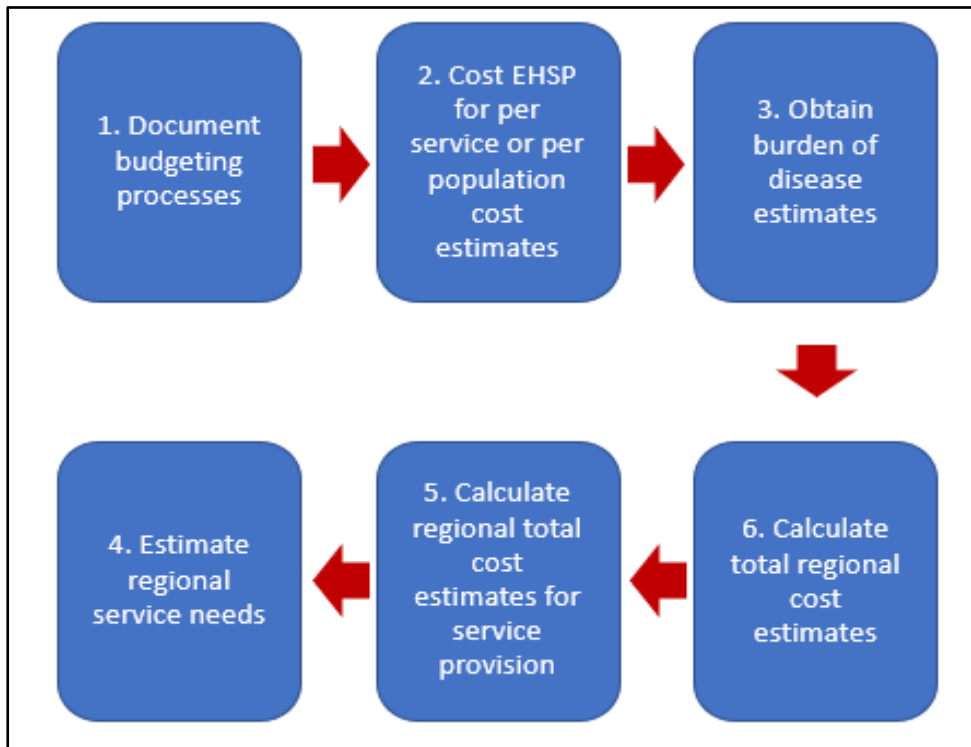
Namibia is developing an EHSP, expanded from the 2014 District Health Service Package to include tertiary care and other services required to meet the population's health needs. Once the EHSP is finalized, the government will need to ensure resources are available to provide this package and avoid implicit rationing whereby services are available only in theory because facilities do not have adequate resources to offer the package. The EHSP is a minimum guaranteed list of services that should be available at each institution defined by the levels of care. By approving the package, the government commits to the minimum health benefit it will provide its citizens regardless of location or socioeconomic status. Guaranteeing this package of services thus requires resource allocation to align with the resource requirements for delivering the services. Allocating resources in line with the EHSP enables the government to take a broader and more holistic view of service delivery and include other factors like disease burden (prevalence and incidence) within the resource allocation criteria.

This approach also considers population data through incidence and prevalence estimates to determine health needs. Through this process, results from calculations based on regional population obtained from option 1 presented above can be further refined by taking into consideration variations in need between regions. However, option 1 provides a rudimentary allocation, while adjustments based on the EHSP require more data and skill capacity within budgetary units to refine.

The process outlined in Figure 3 and discussed below is proposed for developing a framework to allocate resources in line with the EHSP.



Figure 3: Resource Allocation in Line with EHSP



1. **Document the country's budgeting process** to better understand decision points for prioritization and allocation decisions. This includes detailing how the MTEF plan is developed, amended, and adjusted to reflect new macroeconomic expectations. At the MoHSS, document the budgetary cycle starting from the lowest unit involved in the budget formulation until budget bids are submitted to the MoF or estimates are adjusted according to the budget ceilings/envelopes provided by the MoF.
2. **Once the EHSP is developed** and finalized, **ensure the package is costed** and has reasonable estimates of how much it will cost to provide each intervention. Units of measurement for the cost of services can be "per episode of illness," "per patient per year," or "per population group" in the event of population-based services. Units of measurement for costs of services depend on available data from the costing report and the level of disaggregation in the health information system (for data on service utilization and demand).
3. **Obtain disease burden estimates for each intervention** contained in the EHSP. These estimates include prevalence and incidence data, with as much disaggregation as possible (see Table 1). This includes calculations based on population subgroups such as age, sex, and region. Where such estimates are not readily available for the country, international estimates for low- and upper-middle-income countries closely comparable to Namibia can be used. These can be applied and adjusted for any known regional variations. Where available, actuarial estimates and service utilization data from private sector providers and insurers can be used as proxy data or to validate other available estimates. However, such estimates may need adjustments to cater to potential variations in utilization patterns between public and private sector patients.
4. Using estimates of prevalence and incidence for each region, **estimate the total number of people/patients who will need each intervention per year**. Calculating this number is based on the probability of the number of people in each age group who may need an intervention. For example, the expected number of pregnancies is



obtained by multiplying the birth rate by the number of women of childbearing age in a region (see Table 1). The unit of measurement for such an intervention (antenatal visits, delivery) should be clearly stated as "per patient over nine months" or quantified as "per individual visit," as shown in Table 1.

Table 1: Estimating Number of Interventions: Maternal and Child Health for One Region

Intervention (as per EHSP)	Total Population	Percentage in Need of Intervention	Total Number of People/Services	Unit of Measure	Episodes (based on guidelines)	Comments
Antenatal care	A (no. of women of childbearing age)	b% (birth rate)	$C = (a * b\%)$	per visit	4	Can be adjusted for other known factors like percentage coverage for visits)
Delivery: Normal	C (no of expected pregnancies)	e% (proportion of normal deliveries, e.g. 85%)	$f = (c * e\%)$	per delivery	1	Can be adjusted for live births, stillbirths, complications, etc.
Delivery: Caesarian	C (no. of expected pregnancies)	g% (proportion of complicated deliveries)	$h = (c * g\%)$	per delivery	1	
Vaccination: At birth	$i = (e + g)$	j% (proportion of live births)	$k = (i * j\%)$	per dose	1	Adjusted for stillbirths and other deaths
Vaccination: Six weeks	k	l% (percentage of attendance)	$m = (k * l)$	per dose	1	
Etc. (exhaustive list based on EHSP)						

Note: Similar tables can be made for each region. Most data should be readily available from the DHIS or from the costing study.

5. **Obtain the total cost of providing each intervention in each region.** This is obtained by multiplying the number of patients needing an intervention with the cost of delivering that intervention based on the EHSP costing report. Since fixed costs and semi-variable costs, such as HRH, rarely vary at certain levels of coverage, only variable costs are considered. Essential medicines are procured centrally, and their budgets are not directly allocated to regions; thus, they can also be ignored in making such calculations. However, it may be desirable to determine how much is needed for essential medicines, and a similar analysis may be used.

Table 2: Estimating Regional Costs per Intervention:

Intervention (as per EHSP)	Expected Cases (based on calculation in Table 1 above)	Frequency	Cost	Unit of Measure	Total (N\$)
Antenatal care	A	4	c = N\$xx (based on EHSP costing)	Per visit	(a * 1 * c)
Delivery: Normal	F	1	c = N\$xx (based on EHSP costing)	Per delivery	(f * 1 * c)
Delivery: Caesarian	H	1	c = N\$xx (based on EHSP costing)	Per delivery	(h * 1 * c)
Vaccination: At birth	I	1	c = N\$xx (based on EHSP costing)	Per dose	(i * 1 * c)
Vaccination: Six weeks	M	1	c = N\$xx (based on EHSP costing)	Per dose	(m * 1 * c)
Etc. (exhaustive list based on EHSP)					
Cost of package region XYZ (sum of all intervention costs)					N\$xx

Note: Expected cases x no. of episodes x cost per episode): Region Name: XYZ.
 Similar tables can be made for each region. Most data should be readily available from the DHIS or from the costing study.

6. **Obtain the total regional costs of providing the EHSP per level of care** by adding all costs associated with each intervention. This total cost can be compared with previous costs to determine its reasonableness and to validate the calculations. The budgeting committees can make other adjustments to reflect actual utilization rates compared to the normative disease burden calculations. However, it must be noted that current utilization may reflect inefficiencies that reduce patient access. With adequate resources, utilization rates may increase to levels similar to those calculated using prevalence and incidence estimates.

Table 3: Comparison of Expected Allocation Based on EHSP with Historical Allocation

Name of Region (all 14 regions)	Cost of EHSP per Region	Historical Allocation	Variance	Comments
1	Xx	y1	(xx - y1)	
2	Xx	y2	(xx - y2)	
3	Xx	y3	(xx - y3)	
4	Xx	y4	(xx - y4)	
5-13	Xx	Yx	(xx - y5)	
14	Xx	y14	(xx - y6)	
Total EHSP cost for all 14 regions	Sum (xx1-xx14)	sum (Y1-y14)	Differences	

The above process provides a disease burden-responsive approach to allocating resources. It may be the primary approach or a starting point for allocative decision-making. The process can be varied and altered as the MoHSS gains experience and capacity in using data to inform resource allocation. The calculation of expected costs reflects normative utilization rates, which may be higher or lower than actual or current expenditures. This enables a discussion on barriers to utilization of services in the case of higher normative estimates. Where estimates are lower than actual, this may also point to inefficiencies such as overutilization of services, prolonged hospital stays, or services not being provided at the right level of care. Thus, decision makers should examine all observed variances at national and regional levels.

Integration of EHSP into the PBB process

The MoHSS introduced PBB, where resource allocation should be linked to program and disease goals. However, as highlighted in the introduction, this has not been fully implemented with various challenges, including capacity and political commitment. Linking the EHSP to this budgetary reform could provide the impetus required to drive action toward full implementation by providing a direct relationship between budgeting, service delivery, and health outcomes. This approach assumes each program area/unit, such as a clinic, district hospital, or region, will develop plans and targets it aims to achieve and estimate the resources needed to accomplish this. Service coverage calculations on the package can inform these goals instead of only disease prevalence and incidence estimates. This effectively modifies steps 4 and 5 presented above, where realistic targets based on the program's goals and understanding of the context are used to modify the expected population requiring an intervention. For example, the voluntary male circumcision program will modify the expected number of eligible males to be circumcised in a particular year based on known yield/turnup rates after mobilization campaigns. This enables the region to relate spending on other program costs like mobilization campaigns and outreach, with treatment coverage.

Such an integrated approach can also enable regions and program areas to include other costs, such as for servicing and repairing equipment, providing HRH additional training, and maintaining or improving capital, into the estimated total budgets required. A more realistic resource allocation methodology can be achieved by using the PBB approach and aligning the expected coverage of the EHSP with programs' annual targets. Thus, national program strategies and regional goals provide realistic coverage targets for various interventions. Most annual targets on coverage by different programs usually are contextualized to each region and are based on population and other factors. Different regions will have their targets either as percentage coverage or absolute numbers. Based on the circumcision example provided above, some regions had higher success in coverage in earlier years, with a large proportion of eligible males already circumcised. In setting annual targets for such



regions, these may be lower than other regions. This level of flexibility and targeting enables robust discussion of what is achievable compared to the EHSP and how available resources can best be deployed between regions without compromising on efficiency and equity (and can ensure some regions do not get excess resources that they are unable to spend). Coverage adjustments can better align budgeting to other factors such as geographical and economic access and enable the programs to better address priorities neglected within the resource allocation approach.

Conclusion

Allocative efficiencies are central to expanding access to equitable, affordable, and quality health services by ensuring that more health can be produced with the same envelope of resources. However, making decisions to move resources from one intervention, cost center or health system unit to another is complex and will often face resistance. The Second Annual UHC Financing Forum Background Paper notes that while addressing inefficiencies has the potential to unlock value for money, this is often challenging to implement due to the upfront investment and political leadership needed to drive the required changes (UHC Financing Forum Technical Working Group 2017). Making complex changes to how resources are allocated usually goes against entrenched processes and can alter how the MoHSS operates. This requires investments in building technical and political capacity and change management. The recommended options provide essential starting points for further conversation and galvanize political buy-in for incremental changes that can be used to inform broader policy reforms.

The ongoing process of developing a UHC Policy Framework, including an implementation plan, is a crucial window for reform and policy making. Providing evidence to catalyze such reforms is essential and can ensure that policy makers have several informed reform options. There is a strong appetite for more complex reforms such as national health insurance, but these often take longer to achieve. Budgetary reforms such as those proposed above are less complex, are backed by available evidence, and support other ongoing reforms such as the EHSP development and costing process. When implemented along with other reforms such as PBB, the proposed solutions enable the country to start the first sequence of short- to medium-term reforms that improve efficiency in resource allocation and ensure any new system adopted after more complex reforms does not perpetuate the inefficiencies of the current system. Regardless of whatever reform is adopted through the UHC process, how to allocate available and future resources efficiently and equitably remains a central question within health financing. Thus, developing a culture of evidence-based resource allocation provides a starting point that can be further improved through successive implementation, applying lessons learned to improve the process. While these reforms are not wholesale and transformative, they provide incremental change critical in the short term when the resource envelope is fixed.



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