



African Collaborative for Health Financing Solutions

**Assessment of Health Financing
Options in Namibia**
June 2021



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1. Introduction

Since its independence, Namibia has made tremendous progress in improving the standard of living and reducing poverty among its population while transitioning as an upper middle-income country. However, the country still struggles with severely unequal distribution of income as demonstrated by its Gini coefficient of 0.569 being one of the highest in the world¹. This is also reflected in inequalities in health as significant differences exist in access to health between socio-economic groups, gender, and geographic area (rural/urban and regions) among others.

While Namibia has achieved great progress in certain areas of health as demonstrated by the reduction in HIV incidence and tuberculosis (TB) prevalence, life expectancy at birth and prevalence of under-nourishment², the country's health outcomes are still significantly behind other African upper-middle income countries in terms of maternal and infant mortality rates, among others. Mortality rates are generally higher and access to health services is poorer for lower income groups, which clearly indicates persisting inequities in health. Namibia is a vast country with one of the lowest population densities in the world, which is challenging for the health sector to provide universal access to services, especially in the hard-to-reach and sparsely populated areas. Unequal access to healthcare is worsened by Namibia's parallel health system, whereby access to the well-resourced private healthcare services is limited to those who have private medical aid coverage, public service employees covered by the Public Service Employees' Medical Aid Scheme (PSEMAS) and those who can afford to pay for private healthcare out-of-pocket. The unemployed, poor and vulnerable populations are generally restricted to public healthcare services, which are overstretched, providing health services to 80% of the population with only 49% of total health expenditures (THE) and a small proportion of Namibia's healthcare professionals³.

While these inequalities in health exist, the country has performed very well in its 95-95-95 targets of epidemic control so that by 2019, 94% of persons living with HIV/AIDS (PLHIV) aged between 15-64 years knew their HIV/AIDS status, 96% of PLHIV knowing their status were on antiretroviral therapy (ART), and 95% of PLHIV on ART were virally suppressed. However, following a similar pattern to the distribution of income and the inequalities in health, differences exist in access to HIV/AIDS services between socio-economic groups, gender, and geographic area.

As Namibia advances closer to achieving epidemic control across all population groups, it has prioritized the planning for the sustainability of the HIV/AIDS response. Although the government is the major source of funding for non-HIV health services, there is a critical need for sustainable domestic financial resource mobilization for HIV/AIDS, as donors provide substantial contributions for HIV/AIDS (33% of total spending on HIV versus 7% of total health spending) and have indicated their intention to reduce funding support to the country due to its upper middle-income status. In order to maintain control of the epidemic, Namibia needs to identify ways to mobilize more sustainable domestic financial resources or increase the efficiency and equity with which available resources are allocated and spent to sustain the provision of services. While the HIV/AIDS response remains a top priority for the government, there is acknowledgement that sustainable financing for the response can only be secured through broad financing reforms for the entire health sector, which contribute towards the country's efforts to make progress towards universal health coverage (UHC).

The definition of UHC incorporates principles of equity, accessibility, efficiency and quality, which are also in line with the broader political goals of the Namibian government. Health financing mechanisms can serve as tools to assist the government to effectively achieve progress towards UHC, while leveraging broader political priorities as set out under pillar 3 for social progression in

1 World data bank; World Bank. <https://databank.worldbank.org/source/world-development-indicators>. Accessed on 12 May 2021

2 HIV incidence reduced from 5.7 in 2010 to 3.1 in 2019 per 1,000 population, TB incidence reduced from 892 in 2010 to 486 in 2019 per 100,000 population, life expectancy increased from 56.6 in 2010 to 63.7 in 2019, prevalence of under-nourishment decreased from 28.3 in 2010 to 14.7 in 2018. Source: World data bank; World Bank. <https://databank.worldbank.org/source/health-nutrition-and-population-statistics>. Accessed on 12 May 2021

3 The public sector employs only 64% of physicians and 33% of pharmacists in Namibia.

the Harambee Prosperity Plan⁴. The key policy objectives identified through the stakeholder consultations conducted for this assessment, taking into consideration the current context and challenges, include (1) improved equity in access to and utilization of quality health services; (2) improved efficiency and effectiveness in the allocation and utilization of scarce resources; and (3) equitable mobilization of health financing. As such it is imperative that the health financing policies and reforms are evaluated for their feasibility in achieving UHC and their impact on these priorities.

To achieve this, the African Collaborative for Health Financing Solutions (ACS), which supports Namibia's efforts towards sustainable financing for health and HIV/AIDS, was requested to perform an assessment of the health financing options available that would secure sufficient domestic resources to sustain the HIV/AIDS response and meet the broader health financing objectives of government. This assessment reviews a set of health financing options available to the Namibian government, evaluates their feasibility to make progress towards the UHC agenda within the Namibian context in addition to contributing towards the country's priorities, and outlines requirements for the implementation of suitable health financing reforms.

1.1 Objectives of the assessment

The specific assessment objectives include:

1. Assess health financing options including revenue generation, pooling of resources and purchasing arrangements to determine the feasibility of the options within the Namibian context; and
2. Advise on the feasibility of the health financing options together with detailed implementation requirements for the relevant health financing reforms.

2. Methodology

2.1 Study approach

A phased approach was deployed, which included: 1) undertaking of a health financing situation assessment in order to identify key issues and challenges in health financing in Namibia; and 2) assessing the health financing options in terms of revenue generation, pooling and purchasing arrangements to determine the potential and the feasibility of the options within the Namibian context and development of comprehensive recommendations for health financing reforms.

To assess health financing options both quantitative and qualitative approaches were used.

Quantitative approaches:

- To assess the revenue generation potential of the proposed options, the Gross Domestic Product (GDP)-based effective tax rate (ETR) was used. This method quantifies the amount of revenue that could be generated from existing and new sources (Chansa et al., 2018; International Monetary Fund, 2015).
- To assess the potential and feasibility of a mandatory health insurance fund, a World Health Organization (WHO) health financing policy tool, Sim-Ins, was used. This is a computerized tool that facilitates health financing policy decisions by projecting revenues and expenditures for a time period. It determines contributions, utilization rates and health care costs that ensure financial equilibrium of a health insurance scheme under dynamic conditions among other purposes (World Health Organization, 2008). This tool has been used widely across sub-Saharan Africa (e.g. Kenya, Lesotho, Zambia, and Malawi) to assess the potential of social health insurance.

Qualitative approach:

- The Delphi Technique was used, which is a group communication process that facilitates interaction between the researcher and a group of identified experts on a specified topic (Yousuf, 2007). This approach has been used widely internationally to elicit expert opinion and reach agreement, especially on practical issues when informed judgement is required for taking

⁴ <http://hpii.gov.na/social-progression/>

action on many issues such as priority setting and resource allocation, policy determination, and planning among others (Chansa et al., 2018; Chia-Chien & Sandford, 2007; Yousuf, 2007).

- Within this, the McIntyre Framework of 2007 (McIntyre, 2007) was used as an evaluation criterion to guide the interviews. The McIntyre framework 2007 espouses that health financing mechanisms should be assessed according to the following criteria:
 1. Feasibility: Actor/political support or opposition to the existing or proposed health financing mechanism and the availability of technical and administrative capacity.
 2. Equity: Degree of fairness of the existing or proposed financing mechanism (progressivity or regressivity) and whether the burden of financing falls disproportionately on the better-off or worse-off in society relative to their capacity to contribute.
 3. Efficiency: Whether an existing or proposed mechanism generates relatively large amounts of revenues at low cost (Nicole & Manthaer, 2010).
 4. Sustainability: Whether the existing or proposed financing mechanism has long-term stability and potential for generating revenue and is not subject to considerable and frequent fluctuations.

Literature review

A desk review was performed of both peer reviewed publications and grey literature (e.g. health accounts, public health expenditure reviews, government budgets, macro-economic indicators (African Collaborative for Health Financing Solutions, 2019; Ministry of Finance, 2021; Republic of Namibia Ministry of Health and Social Services, 2018; World Bank, 2019) etc.).

2.2 Limitations of the assessment

Due to Covid-19 restrictions, this assessment did not allow for the technical team to engage in extensive in-person consultations and was mostly limited to desk reviews and virtual key informant interviews. This is a significant limitation as some of the methodologies outlined above (both quantitative and qualitative) could not be fully applied.

3. Health financing context

3.1 Revenue generation

The economic context is paramount when assessing health financing options as the economic situation of a country has significant implications on the revenue generation potential and the feasibility of health financing options. This is particularly relevant in Namibia, where the public health sector is predominately funded through taxation, which is generated through mostly progressive taxes. Growth in the GDP strongly influences the government's ability to generate revenue and is critical to understanding the governments' capacity to increase health sector spending (McIntyre & Matheus, 2014). Since 2017, the Namibian economy has been experiencing a downturn and witnessed its largest contraction in 2020/21 due to COVID-19. However, there are projected growth prospects in GDP of 2.1% in 2021, 2.8% in 2022 and 3.8% up to 2024. Despite these GDP growth prospects, government revenue collections are expected to decline by 6.1% due to contraction of Southern African Customs Union (SACU) receipts in 2021/22 and by 4.8% in 2023/24 (Ministry of Finance, 2021). SACU revenues are the highest contributor to indirect taxes. However, this source of funding is relatively volatile and faces serious decline. Compounding the situation is the introduction of African Continental Free Trade Area in 2021, which might further reduce the revenues from SACU. The slow GDP growth projections and the reduction in government revenues will hamper the government's capacity for general government expenditures and also its ability to increase or sustain the current investments in health.

The magnitude of the fiscal deficit and long-term debt are also important when determining the government's ability to increase spending, including spending on health, as these factors have an influence on economic growth (McIntyre & Matheus, 2014). Namibia's fiscal deficit reached 4.5% of GDP in 2019/20 and 9.7% in 2020/21, after which it is estimated to decrease to 8.6% of GDP in 2021/22 and to 5.5% in 2024 (Ministry of Finance, 2021). This deficit is significantly higher than other

African upper middle-income countries, which is worsened by the fact that this deficit is expected to be financed through domestic and international borrowing (Ministry of Finance, 2021). The estimated debt to GDP ratio from 2021/22 to 2023/24 of over 60% is also well above the International Monetary Fund recommendation of a “prudent debt-to-GDP ratio threshold” of less than or equal to 40% for developing and emerging economies (McIntyre & Matheus, 2014). As such, it might lead to debt unsustainability. High debt levels imply that the government will need to allocate a significant portion of its revenues to service and repay the debt. As a result, the government will face even greater pressure on the revenues for use as general government expenditures, and also have negative implications on the government’s ability to allocate resources towards health.

The population at working age in the formal sector responsible for revenue generation remains low compared to peer countries in the upper middle-income category, which implies that the ability of the government to collect substantial tax revenues through income tax is somewhat limited. About 57% of the Namibian working population works in the informal sector (National Statistics Agency, 2018) which faces huge challenges of irregular and low wages, lack of legislation and regulation of employment, limited access to social security and medical aid benefits (Brockmeyer & Ebert-Stiftung, 2012), and limited contributions towards the tax revenues of the government. This again inhibits government spending, including spending on healthcare.

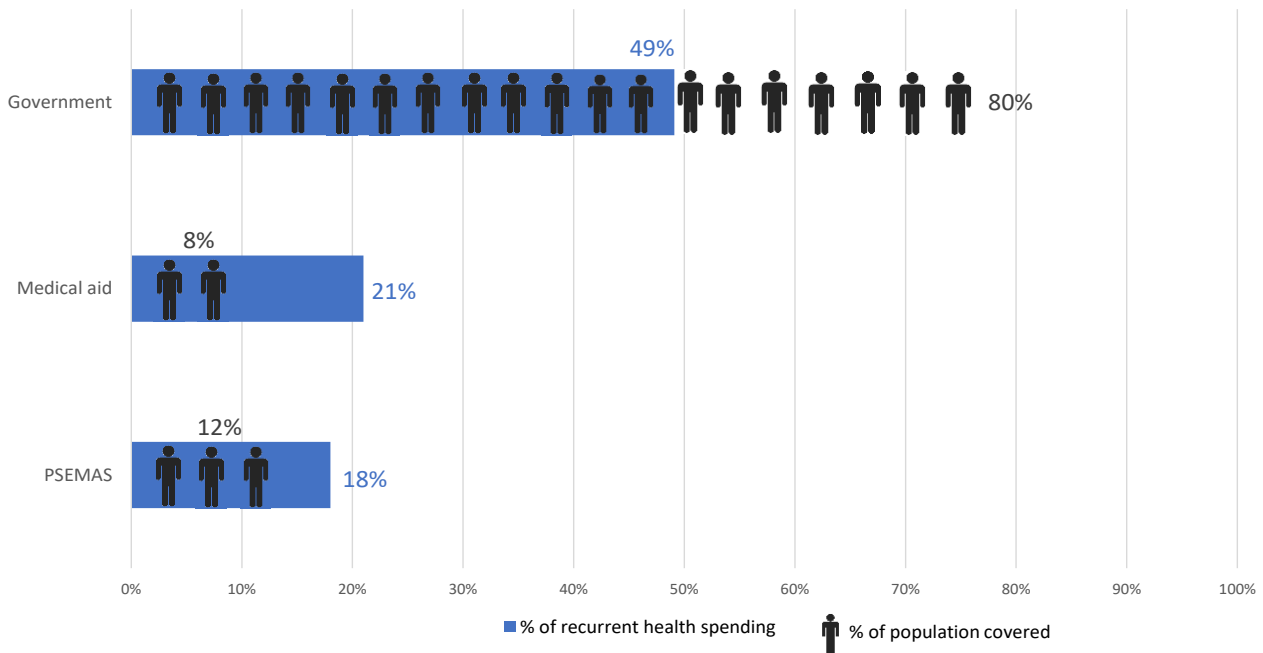
Namibia’s investment in health is high relative to other African upper-middle income countries at 9% of GDP and the government’s commitment to health is evident from the high allocation of government expenditures to health in relation to general government expenditures, with the government coming close to reaching the Abuja target of allocating 15% of government budget to health with spending of 14.5% in 2017/18 (Ministry of Health and Social Services, 2020), and a budgetary allocation of 19.1% in 2021/22 (Ministry of Finance, 2021). Domestic resources (including government, private companies, NGOs and households) contribute 93% of the total health expenditures while donors contributed only 7% in 2017/18 (Ministry of Health and Social Services, 2020), which makes the revenues for health financing highly sustainable and predictable to the extent that public funding is planned for multiple years in the medium-term expenditure framework. However, donors finance a substantial portion of HIV/AIDS programs excluding ARVs, making the HIV/AIDS programs highly vulnerable to risks of donors’ sudden withdrawal and thus potentially unsustainable. The per capita health spending of US\$ PPP 916 is lower than that of Namibia’s peers of other African upper-middle income countries and health outcomes are worse, particularly in terms of maternal and infant mortality rates, among others (World Bank, 2019). This demonstrates the need for some additional resources, while simultaneously needing to improve the efficiency with which the resources are allocated and utilized.

Direct-out-pocket spending, which is known to dissuade the poor from utilizing health services, is very low at 7% of the total health spending. This is well below the WHO 20% threshold, beyond which financial catastrophe becomes more likely for individuals and households. However, in a situation where there are nominal fees in the public sector, this could mean any of the two: 1) existence of good health coverage that the poor are able to access needed services; or 2) households are not seeking health care due to affordability challenges (World Bank, 2019), even though the poorest are exempted from payment.

3.2 Pooling of resources

Risk pooling in health spending is critical as it determines the extent to which individuals will bear the financial burden when they require health care and is considered one of the key indicators of the level of equity of the health system. Risk pooling across a large group of individuals is important to ensure that the risks are spread evenly to ensure that those who cannot afford healthcare and are the sickest receive support from those who are wealthier and healthier. Namibia has three separate pools comprising the government at 49% of THE, PSEMAS at 18% of THE and private medical aid funds at 21% of THE in 2017/18 (Ministry of Health and Social Services, 2020). As illustrated in the figure below, the spending on each resource pool is misaligned to the size of the population covered by each, with the government pool covering 80% of the population, PSEMAS covering 12% of the population and private medical aid funds covering only 8% of the population.

Figure 1: Comparison of population coverage versus health expenditures by risk pool



Source: Ministry of Health and Social Services, 2020.

Health insurance funds, including PSEMAS and the private medical aid funds, mainly cater to higher-income groups and provide better access to healthcare than the government health system that is funded through general taxes. Evidence shows that individuals in higher income quintiles are more likely to live in a household with all household members insured and that sick individuals living in households with all or some members insured are more likely to access care than those living in a household where none of the members are insured (Namibia Statistics Agency, 2018) indicating serious inequity in terms of financing and utilization of health care services. Deepening these inequities is the fact that 85% of PSEMAS resources are derived from government funded subsidies, effectively subsidizing civil servants who are deemed to be relatively well-off in relation to the significant levels of poverty prevalent in Namibia. Furthermore, the public service employees make flat rate contributions to PSEMAS, making its financing highly regressive. Private medical aid funds also face serious inequities in financing and access to health benefits as they are risk-rated and suffer from adverse selection. The Namibian Association for Medical Aid Funds (NAMAF) publishes annual benchmark tariffs, which medical aid schemes use to inform their reimbursement rates to health care providers for services provided to members. However, these benchmark tariffs are not mandatory, which means that providers are able to charge any additional co-payments to insured patients that are in no way regulated (World Bank, 2019). This weak regulation results in a lack of incentive for both the medical aid schemes and providers to improve technical efficiency as they can easily shift the high costs to co-paying insured patients (World Bank, 2019), while also resulting in ineffective financial protection and high co-payments paid by insured patients compared to the uninsured.

3.3 Purchasing

The public health sector suffers from inequities and inefficiencies in distribution of financial resources as resources are not allocated to geographical areas, health facilities and programs based on population or health needs. The public health sector does not make use of any adjusted indicator of need for the allocation of resources (McQuide, Kolehmainen-Aitken, & Forster, 2013). Similarly, the use of line-item budgets further contributes to inefficiencies in resource allocation as there is no relationship between resource inputs and outputs. The majority of resources are consumed by hospitals (secondary and tertiary level hospitals) despite the government policy to focus on the primary health care level, and the MoHSS also spends more on administration than on primary level

care, indicating a lack of allocative inefficiency (Republic of Namibia Ministry of Health and Social Services, 2018; World Bank, 2019). There is further allocative inefficiency as a result of expenditures being highly skewed towards curative care as opposed to preventive care (Republic of Namibia Ministry of Health and Social Services, 2018; World Bank, 2019). Technical inefficiency also exists as a result of many district hospitals operating below the ideal level of efficiency (Jones & Ashagari, 2018; Zere et al., 2006).

Purchasing in the private health sector uses a fee-for service payment structure, whereby private healthcare providers charge for the specific services provided. This payment mechanism enables overservicing and a bias towards expensive procedures versus those that are clinically necessary. For example, the caesarean rate in 3 private hospitals in Namibia was found to be 78% in 2015, which is significantly more than the 15% threshold recommended by the WHO⁵. Attempts have been made to control the escalating costs in the private health sector by the Namibian Association of Medical Aid Funds introducing tariffs for the reimbursement of medical expenses by the medical aid funds. However, these tariffs only serve as guidelines for the medical aid funds and do not have any authority over the price-setting by private healthcare providers. As such, any amount charged in excess of these tariffs becomes payable by the medical aid fund beneficiary as out-of-pocket payment, resulting in very high out-of-pocket payments being reported by the insured (World Bank, 2019).

4. Findings of the assessment

The findings of the assessment of the proposed health financing options within the Namibian context are analyzed in this section. The health financing options are categorized according to the health financing functions including revenue collection, pooling of resources and purchasing.

It is worth noting that the thirteen health financing options presented in this section are not mutually exclusive. They are suggested as a range of choices that the Government of Namibia can tap into in order to engage in the policy dialogue required for their implementation. The list provides the Government of Namibia with alternative solutions geared to achieve the three key policy objectives cited in this report. It also draws attention to the large spectrum of adaptations of the health financing system.

As such, health authorities should consider phasing implementation based on the political negotiations required to introduce each reform. This sequencing is essential as it allows for intra-governmental alignment and buy-in, time for each of the Ministries involved to prepare for their identified actions while still enabling the MoHSS to play the stewardship role to drive the entire reform agenda.

4.1 Revenue Collection

Evidence reveals that prepaid resources are key to achieving UHC goals of effective coverage and financial protection compared to other sources of financing e.g. out-of-pocket payments (Cashin et al., 2017). As such, there is great need for low-to-middle income countries (LMICs) to increase public funding for health services and also ensuring that revenue collection mechanisms are progressive and follow principles of solidarity.

In Namibia, revenues for financing health are collected from the following five sources:

- Government through general revenues
- Government transfers and employee contributions to the public service employee medical aid scheme (PSEMAS)
- Contributions and premiums to private medical aid funds (PMAF) paid by employers and employees
- Donors
- Households as out-of-pocket (OOP) payments.

⁵ <https://www.namibian.com.na/index.php?id=139527&page=archive-read>

The options available to the Namibian government to generate additional domestic resources for health and to improve on the progressivity of these contributions are assessed below.

4.1.1 Increase government allocation to the Ministry of Health

The government of Namibia is highly committed to the achievement of the Abuja target of allocating 15% of government budget to health (African Union, 2001). This commitment has been evidenced by increased government expenditure on health as a proportion of general government expenditures, which reached 14.5% in 2017/18, and rose to a budgeted 19.1% in 2021/22⁶. Nonetheless, the allocation to the MoHSS specifically remains below the Abuja target.

Revenue generation potential

A review of the government allocation to health shows that the Abuja target has already been met based on total health spending by the government (Table 1). However, the allocation to the MoHSS specifically, which provides healthcare to the entire Namibian population and not just selected sub-populations, remains below the Abuja target up to 2023/24.

Table 1: Government Allocations to Health, 2021/22-2023/24

	2020/21	2021/22	2022/23	2023/24
MoHSS	8,051,876,000	8,081,016,000	8,111,630,000	8,153,309,000
MOE (HIVAIDS program)	2,113,000	2,155,000	2,220,000	2,285,000
MOD (Military hospital)	98,985,000	81,838,000	90,187,000	90,668,000
MOF (Contribution to PSEMAS)	2,657,938,000	3,164,350,000	2,268,466,000	1,916,503,000
Total	10,810,912,000	11,329,359,000	10,472,503,000	10,162,765,000
Total GRN budget	63,656,328,000	59,449,917,000	59,513,390,000	58,458,291,000
% allocated to health	17.0%	19.1%	17.6%	17.4%
% allocated to MoHSS	12.6%	13.6%	13.6%	13.9%

Source: Ministry of Finance, Estimates of Revenue, Income and Expenditures

Feasibility

Even though the Abuja target has already been met up to 2023/24 when taking into account health spending by all ministries, the budget available to the MoHSS to provide healthcare to the general population remains below the Abuja target (Table 1). Increasing the government allocation to the Ministry of Health, within the context of reduced total government revenues and increased government debt appears to be unfeasible. However, the MoHSS could still strive to lobby for increased proportion of the allocation to its department through:

- Organizing high-level meetings with Ministry of Finance (MOF) to increase the allocation to MoHSS as health spending on the poor and vulnerable populations that the public health services cater is comparatively low. Discussions should encourage MOF to identify other sectors/areas of low priority or where efficiency gains could be made to reallocate the funds to the MoHSS for the provision of public healthcare services;
- Conducting annual modeling of expected resource needs versus expected resource availability via gap analysis to generate evidence with which to lobby the MOF for additional funding; and
- Developing tools and models that clearly show the causal link between health investments and macroeconomic performance (health and the economy especially during this COVID-19 pandemic), allowing the MoHSS to present a strong business case for increased resource allocation.

⁶ Including Ministry of Finance contribution for PSEMAS, Ministry of Education, HIV/AIDS program and Ministry of Defense, military hospital with the pure health budget vote allocated 13%

Sustainability

While the use of government revenues to finance health is generally regarded as highly sustainable, in Namibia's current fiscal situation, increasing government allocations to the Ministry of Health in 2023/24 might be considered unsustainable due to already high budget deficits, which are financed by substantial borrowing from both internal and external sources (Ministry of Finance, 2021).

Equity

Increasing the government allocation through general government revenues (the majority of which is through general tax revenues) will be equitable as long as it is raised through the highly progressive direct tax system instead of indirect taxes.

Efficiency

Reallocating additional resources to the Ministry of Health by the MOF would not entail any additional infrastructure costs for revenue collection. However, increased capacity and strengthened public financial management systems would be needed to ensure appropriate use of the increased resources in the health system.

4.1.2 Introduce new taxes/share newly introduced VAT revenues with the health sector

The introduction of new tax rates is viewed as one method of increasing government's fiscal space, which is the capacity of the government to provide additional budgetary resources for health without any prejudice to the sustainability of its position. Increasing tax rates in order to finance health has been a long-standing recommendation in different studies in Namibia (Republic of Namibia Ministry of Health and Social Services, 2018).

Revenue generation potential

- **Increased mandatory contributions through taxation to finance health:** Even though this has been a long-standing recommendation in Namibia, the government has clearly stated that there will be no increase in general tax rates. Instead, the government aims to focus on the improvement of tax administration and reforms aimed at strengthening fairness and equity principles of the tax system (Ministry of Finance, 2021). This approach is particularly important in the prevailing economic context and as the government currently faces an expected decline in government revenues by 6.1% in 2021/22 and 4.8% thereafter up to 2023/24 financial year (due to decline in SACU pool revenues).
- **Sharing newly introduced VAT revenues with the health sector:** There are few new VAT taxes that have been introduced to ensure equity. In general, indirect taxes tend to be regressive unless they target specific items that are generally only consumed or purchased by richer population groups. To this extent, the most notable newly introduced VAT of 15% is on fees of all asset managers in 2021/22 financial year. Since investments are generally only maintained by the wealthier population groups, this is deemed to be a relatively progressive indirect tax. However, this is not expected to generate much revenue (Ministry of Finance, 2021). As such, there is little potential for raising additional revenue through new VAT taxes or for those to be shared with the health sector.

Feasibility

In other upper middle-income countries, it is feasible to share VAT proceeds with the health sector. For example, Ghana introduced VAT of 2.5% as a major source of finance for the Ghana National Health Insurance Scheme (Abiuro, Alatinga, & Yamey, 2021). However, the government of Namibia has already stated that there would be no tax rate increases, this option of sharing VAT proceeds with the health sector would be unfeasible.

Sustainability

Depending on the type of tax and how it is charged, this option could be sustainable if implemented in the appropriate economic context. However, in the Namibian context where it is highly unfeasible

to generate additional revenues through additional taxes or to share the little taxes generated from the equity VAT, the issue of sustainability of this source of financing for health would not arise.

Equity

Generally, a revenue-neutral uniform VAT is regressive in its impact on the income of different households (Hossain, 1995). VAT could however be targeted to apply to specific items that would be more likely to be purchased by wealthier households, thereby achieving some extent of progressivity. Since the amount of VAT that is expected to be collected is already minimal and also would unlikely be shared with the health sector, the issue of inequity in financing health through VAT would not arise.

Efficiency

This would be an efficient source of revenue to the government as the infrastructure for VAT collection already exists. However, since it will not be feasible to share with the health sector owing to the small amounts that would be generated (Ministry of Finance, 2021), this issue in the health sector does not arise.

4.1.3 Add a sugar tax on sugary sweetened beverages (SSB)

Increased taxation through dedicated taxes such as “sin taxes on tobacco and alcohol, and sugary beverage taxes” have been recommended in previous studies as a method to increase government fiscal space while also reducing consumption of the earmarked products to improve health (World Bank, 2019). However, the proposed recommendation on ‘sin’ taxes on tobacco and alcohol (whose revenues could be earmarked for health), faces a serious challenge in Namibia since the government has already increased “sin” taxes on tobacco and alcohol in the 2021/22 financial year as part of the general tax revenues (Ministry of Finance, 2021). Therefore, this assessment only focused on the addition of a sugar tax on sugary sweetened beverages (SSB), like those introduced in South Africa.

Revenue generation potential

As there was no access to primary data in Namibia on average prices of SSB products e.g. carbonated soft drinks, concentrates, fruit juices, tea & coffee, milk and sugar, estimates (ratio of expected revenues from SSB taxes to GDP per annum) from neighboring South Africa, from where the majority of the sugary sweetened products are imported, was used and applied in Namibia (Saxena et al., 2019; Stacey et al., 2019). The estimates show that SSB taxes in Namibia would raise about N\$200-220 million annually. Despite low revenue potential, it should be noted that the major reason for the introduction of SSB taxes in other countries is to reduce sugar consumption, and in turn to reduce the prevalence of obesity and diabetes⁷ (World Health Organization, 2015, 2017) (Saxena et al., 2019). While diabetes prevalence in Namibia at 4.5% of the population aged between 20 and 79 years is below the global rate of 8.8% and the average across sub-Saharan Africa of 5.4%, it is noted that the rate is increasing in Namibia. The prevalence of overweight is of greater concern with Namibia’s prevalence of 40.6% exceeding both the global (38.9%) and the sub-Saharan (28.9%) prevalence rates (World Databank, 2021).

Feasibility

Evidence from the literature shows that it is feasible to introduce SSB taxes as a health promotion strategy as evidenced in the reduction of sugar sweetened beverages in Mexico, whereby the consumers have substituted sugar sweetened beverages with water (Colchero, Rivera-Dommarco, Popkin, & Ng, 2017) and South Africa where producers had to reformulate and redesign their products to reduce sugar content to avoid taxation (Stacey et al., 2019).

⁷ A detailed study similar to Saxena and colleagues (Saxena et al., 2019) and Stacey and colleagues (Stacey et al., 2019) that was done in South Africa prior to the introduction of SSB tax is required. Such a study would collect Namibian primary data and look at the following, among others: impact of the tax on SSB consumption and on health (resulting changes in body mass index, changes in mortality due NCDs especially type 2 diabetes), resultant savings associated with forgone treatment for NCDs, increase in tax revenues, reduction in out-of-pocket spending to households, savings in indirect losses associated with productivity losses, distributional impact among socio-economics groups etc.

However, the political economy of adopting an SSB tax is complex and can face significant challenges (Abdool Karim, Kruger, & Hofman, 2020). This is the case for Namibia, which despite recommendation of the policy to introduce SSB tax in order to reduce sugar intake (SSBs seen as one of the major contributors in non-communicable diseases) in its multisectoral plan championed by the Prime Minister's Office, there has been no progress made towards formulation or introduction of such a tax (Amukugo et al., 2021). The reasons for this situation include: 1) having different views at the highest level of government as evidenced in 2016 when the MOF categorically denounced such a tax and instead suggested interim more feasible measures such as the zeroing of sugar which has been effected (Amukugo et al., 2021); 2) very little information publicly available to gauge SSB and related industry attitudes with industry players refusing to participate in the study by Amukugo and others (Amukugo et al., 2021); and 3) media creating the impression that SSB taxes would lead to other issues, such as employment losses as reported in the neighboring South Africa (Amukugo et al., 2021).

Sustainability

As taxes on SSBs have not been implemented for a long time and are still regarded as innovative measures, their sustainability has not been assessed. Governments are still reviewing taxes on SSBs to determine whether they are achieving the intended purpose or not.

Equity

Opponents of SSB taxes have argued that these taxes would be regressive and fall disproportionately on the poor (Davis, 2016). In a systematic review by Backhoer and others (Backholer et al., 2016), it was found that the tax burden was regressive while the modelled health benefits were progressive in the United States and Australia. However, evidence from neighboring South Africa shows that the introduction of SSB tax bears the smallest tax burden increase on the poorest quintiles (Saxena et al., 2019). Since South Africa and Namibia share a similar context of having very unequal societies, the imposition of SSB tax could yield similar equity results.

Efficiency

If this tax is introduced in Namibia at the same rate as in neighboring South Africa at 11% of the retail price, there would be no additional infrastructure costs. As such, it would be an efficient source of revenue collection though marginal.

4.1.4 Introduce social impact bonds for certain health and social services

Social impact bonds (SIB) are an innovative financing mechanism currently under design and implementation in different sectors of the economy in various other countries around the globe including in sub-Saharan Africa (e.g. South Africa and Cameroon). This is a type of performance contract that focuses on outcomes, particularly payment by results, in which the public sector partners with private-for-profit or philanthropic social investors to finance interventions that tackle social problems e.g. for non-communicable disease management, early childhood development, youth unemployment etc. The activities are often delivered by a third-party provider organization with the coordinating role played by SIB specialists (Fraser et al., 2018). This results in public sector savings. Further, the investors provide up-front finance to mount the intervention and are repaid, including an agreed premium, if specified client outcomes are achieved. If the outcomes are not achieved the investors would stand to lose their initial investment, which means that the risks are shifted from the public to the private sector (Fraser et al., 2018).

Revenue generation potential

SIBs have the potential to contribute an estimated US\$2.5-3 trillion globally in annual investments for the UN's Sustainable Development Goals globally (UNDP, 2019). The impact bond market is growing rapidly such that by 2019, there were 135 impact bonds in 28 countries covering many areas such as employment, social welfare, health, education, and criminal justice, with only few in developing countries (UNDP, 2019). However, despite these high levels of projected investments, the impact bond market currently remains small at about US\$370 million with an average of US\$3.7 million upfront capital investment (UNDP, 2019). In the health sector, three SIBs exist globally to target health outcomes with a value of US\$26.5 million in upfront investment and US\$38.1 million in

outcome funding aimed to impact the health of at least 31,600 people (Clarke, Chalkidou, & Nemzoff, 2018).

Therefore, the potential of SIB in Namibia is also deemed to be significant and is regarded as a substantial source of potential funding for the health sector. While SIBs do not strictly serve as source for additional revenue since the government would still need to repay the initial investment as outcomes are achieved, there is a potential for cost savings through downside risk mitigation.

Feasibility

SIBs could be feasible in Namibia, having been successfully designed and implemented in neighboring South Africa with promising results in unemployment reduction among the youth and early child development (Boggild-Jones & Gastafsson-Wright, 2019; Tortorice et al., 2020). In addition, South Africa has just designed and commenced implementation of a new SIB aimed at improving health and quality of life of adolescent girls and young women, focusing on HIV prevention, treatment and management of unintended pregnancies among school going adolescent girls and young women (Abdullah et al., 2019).

However, despite such potential for feasibility, it could face formidable challenges in Namibia, as has been the case in other countries. A lack of publicly available information on the estimated impact and value for money has been found to be one of the factors that hinders the potential of SIBs (Clarke et al., 2018). Furthermore, the feasibility, design and due diligence take considerable time to negotiate a SIB deal. As such, it could entail significant investment, especially where it is not certain that the project would ultimately materialize (UNDP, 2019). In other developing countries, experience has shown that investors sometimes do not understand the local market and have concerns about economic and political stability which in turn affects costs, (UNDP, 2019), and Namibia could face a similar situation. SIB could also be constrained by legal issues, including ability of investors to use outcome-based contracting modalities, while also facing challenges in measuring attribution of SIB to outcomes (UNDP, 2019). Finally, strong local service providers are needed to implement a SIB deal to ensure they can be responsive to implementation challenges and can adjust their programs where delivery is weak in order to realize the predefined outcomes (UNDP, 2019) and this may not be readily available in Namibia.

Sustainability

As SIBs are an innovation and currently remain a work in progress, there is no evidence on their sustainability as a financing source and mechanism for financing health and social services. However, the results from the current pilots are encouraging and have generated a lot of interest among investors and governments, which could be an indication of high prospects of the SIBs in the future (UNDP, 2019).

Even though there is significant potential, the sustainability of SIBs is not guaranteed as the risk is borne by the investor. Once the outcomes are not achieved, the investor can pull out from the deal and jeopardize the provision of the social services to the targeted poor communities, making the SIB unsustainable.

Equity

SIBs could be an equitable source of finance in Namibia as it would entail investments by the private sector or philanthropists into services that target the poor and the vulnerable. The Cameroon Cataract SIB provides a good example where services are accessed by the poor (Tortorice et al., 2020). The new South African SIB in health targets the vulnerable, specifically adolescent girls and young women from poor communities, (Abdullah et al., 2019) and is also a good example of equity in financing.

Efficiency

The efficiency of SIBs is still to be documented. However, as noted by UNDP (UNDP, 2019), the feasibility, design and due diligence take considerable time to undertake, and could entail significant investment, especially where it is not certain that the project would ultimately materialize. Even

though this could be the case, there are good returns for investment at about 8% for the investors if the outcomes are achieved as expected in the Cameroonian Cataract SIB (Tortorice et al., 2020).

4.1.5 Reduce government transfers to PSEMAS and increase the employee contributions

Currently government contributes 85% to PSEMAS, while civil servants contribute 15% to total PSEMAS revenues through employee contributions of a flat rate of N\$120 per principal member plus N\$60 for each dependent for standard coverage and N\$240 plus N\$120 for each beneficiary for superior coverage. The contribution by government is higher than the contributions made by other countries with similar schemes (World Bank, 2019). Recommendations have been made that such high contribution from government be reduced to save resources, which could be allocated to other priority sectors. Simultaneously, the member contributions to PSEMAS should be increased. Furthermore, the employee contributions should be changed as a percentage of the employee salaries to be more progressive than the current flat rate.

Revenue generation potential

Over recent years, the government typically contributed 85% to PSEMAS and employees contributed 15%. Various options are available to adjust these contribution ratios and the revenue generation potential is just one of many options available to illustrate the effects of rebalancing the contribution ratio. The adjustments to the PSEMAS contributions used in this example are based on the explicit recommendations proposed by the World Bank in the Public Expenditure Review for Health that was conducted in 2019. If government contributions were to be reduced to 50% in line with the benchmarks of similar schemes in other countries (World Bank, 2019) and employee contributions were to be doubled, the government could generate saving of approximately N\$1.1 billion per annum, which could then be reallocated to the MoHSS to provide health services to the unemployed and poor population. The implementation of this approach would need to go hand-in-hand with a comprehensive review of the PSEMAS benefit package, elimination of wasteful spending, and a review and reduction of Methealth's operational costs and profit margins, as there would be a reduction in the overall revenue available to cover PSEMAS expenditures.

Table 2: Contributions to PSEMAS by government and civil servants (in Millions N\$)

	2016/17	2017/1 8	2018/1 9	2019/2 0	2020/2 1	2021/2 2	2022/2 3	2023/2 4
Actual/budgeted government contribution to PSEMAS	2,213	2,537	2,516	2,414	3,100	3,130	3,136	2,896
Actual/budgeted employee contribution to PSEMAS	455	420	420	820	820	820	820	820
Total	2,668	2,957	2,936	3,234	3,920	3,950	3,956	3,716
Reducing government contribution to 50% of original budget				1,617	1,960	1,975	1,978	1,858
Doubling employees' contribution				1,640	1,640	1,640	1,640	1,640
Total				3,257	3,600	3,615	3,618	3,498
Savings for government				797	1,140	1,155	1,158	1,038

Source: Ministry of Finance budget documents

Feasibility

This could be feasible in Namibia as other governments have been able to implement a 50% contribution to similar schemes (World Bank, 2019). However, there will be serious resistance as it would imply reduction in access to high/superior benefit packages and increased costs to public

service employees. Nonetheless, there is a general acknowledgement by senior government decision-makers of the sustainability and inequity issues faced by PSEMAS, and commitment to implement changes to the scheme as evidenced by the establishment of the PSEMAS reform committee.

Sustainability

This could be a highly sustainable pool funding mechanism, which would save government resources for reallocation to other priority health services such as HIV/AIDS, malaria and TB that are currently largely supported by development partners.

Equity

The huge financing by government for healthcare of civil servants, who are deemed to be better off than most in the context of significant levels of poverty, broadens the already prevalent income inequalities and serious inequities in health (McIntyre & Meheus, 2013). Thus, the reduction of government contribution and the doubling of employee's contribution would at least to some extent reduce the inequities in health financing. The scheme will further result in greater equity in health financing as contributions would be progressive if they are related to income.

Efficiency

As there would be no additional costs for implementing this policy decision, it would be an efficient mechanism of financing health.

4.2 Revenue pooling

Revenue pooling is a process where contributions are combined so that the costs of health care are shared by all and not borne by individuals at the time of illness, with risk sharing as the ultimate goal (Jowett & Kutzin, 2015). Apart from the evaluation criteria of feasibility, equity, efficiency and sustainability of revenue pooling mechanisms (McIntyre, 2007), the additional considerations that need to be considered for health insurance include adverse selection, cream skimming, subsidization and compulsion, and number of pools (multiple or single) (Jowett & Kutzin, 2015).

Revenue pooling in Namibia is done through the government with the MoHSS covering the vast majority of the population, the public sector employees medical aid scheme (PSEMAS) as a voluntary scheme covering public sector employees and their dependents, private medical funds using voluntary schemes covering members and their dependents depending on affordability of contributions and risk profile for a benefit package accessible in the private sector, non-government organizations (NGOs) that are funded by donors to provide services to targeted population groups, geographic areas etc., and households paying through direct out-of-pocket to health providers as direct user fees or co-payments (for those that are insured).

The options available to address some of the revenue pooling challenges in Namibia are assessed below.

4.2.1 Consolidate resource pools into a mandatory social health insurance scheme

Social health insurance (SHI) is a form of pre-payment intended to pool risk and protect beneficiaries from catastrophic health care expenditures (Acharya et al., 2012). SHI is typically limited to the employed population, who can contribute to the scheme. SHI can serve as: 1) a mechanism to increase equitable access to health care services by providing an alternative to direct out-of-pocket expenditure; and 2) act as a source of government revenue to increase resources available for health (Abihiro et al., 2021). With household out-of-pocket expenditure as percent of total health expenditure being comparatively low in Namibia, the primary benefit of introducing SHI in Namibia would be to increase available resources for health.

As such, the creation of one risk pool (consolidation of pools) for the employed population through SHI, which can be expanded over time to include the entire population in the form of National Health Insurance has been continuously recommended as a solution to deal with some of inequities and inefficiencies in health financing and health care utilization in Namibia.

For this report, the financial impact of a SHI scheme covering government and private sector employees has been assessed. SHI schemes can differ in many ways, including type of health services covered and sectors of the workforce enrolled. Given Namibia's small population, an assumption of complete coverage of government and private sector workers has been made in this analysis covering a total of 98,225 civil servants and 222,655 private sector employees (see Annex 1 for more details).

Revenue generation potential

Revenue generation is not guaranteed with SHI, where the primary objective is often to increase access to health care rather than to raise income. The liquidity of a SHI scheme depends on the mechanisms by which the insurance scheme generates revenue and manages it. If not carefully managed, a SHI scheme can quickly become a loss-making entity that requires continuous life support from government.

The SHI scheme in Namibia would collect revenue through an automatic contribution from members' salaries. As shown in Table 2, a scheme covering a basic package of services in the public and private sector would make losses if contributions were in line with international benchmarks of similar schemes of 6% of salaries, comprising contributions of both employer (3%) and employee (3%) (McIntyre & Meheus, 2013). With these contributions, the scheme would run a loss and would require government subsidies to be sustainable. The losses would be higher if the administrative costs are similar to those of the current insurance schemes operating in Namibia at over 20%. It is noted that the current contributions to PSEMAS and private medical aid schemes amount to N\$5,779 million, which means that the percentage contributions could be increased slightly to generate revenue similar to the current revenue of these funds. For more details on the data and assumptions used in the WHO Sim-Ins model, see Annex 1.

Table 3: Combined Health Insurance Revenues and Expenditures (in Millions N\$)

Total Expected Contributions Per Annum	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Government- both employer & employees (3%)	1,392	1,564	1,757	1,974	2,218	2,492	2,800	3,146
Private – both employer & employees (3%)	4,051	4,552	5,114	5,745	6,455	7,252	8,148	9,154
Total Annual Contributions (In Million N\$)	5,443	6,116	6,871	7,719	8,673	9,744	10,948	12,300
Expected Cost for In-patient per Annum	255	159	177	198	221	247	276	309
Expected Cost for Out-patient per Annum	5,213	5,823	6,505	7,267	8,118	9,068	10,130	11,316
Administrative Cost (10%)	544	612	687	772	867	974	1,095	1,230
Reserve (3%)	163	183	206	232	260	292	328	369
Total Expenditure (In Millions N\$)	6,175	6,777	7,575	8,469	9,466	10,581	11,829	13,224
Balance of Fund (Surplus/Deficit)	(732)	(661)	(704)	(750)	(793)	(837)	(881)	(924)

Feasibility

Managing a SHI scheme requires significant institutional capacity. Contributions must be collected from members, financial risks closely managed, and expenditures monitored on a continuous basis. Technical capacity for health financing in Namibia already suffers from a number of capacity constraints, as seen with PSEMAS, and managing a SHI scheme would present additional challenges. In addition, pooling the schemes would bring fears of losing superior medical benefits packages among the already insured members in both the public and private sector. However, to deal with such a situation, members could have an option to purchase additional insurance cover for services outside the basic benefit package, similar to the arrangement that has been proposed in South Africa. Evidence also shows that it is highly unfeasible to expand SHI schemes through

voluntary means by the informal sector (Barasa, Rogo, Mwaura, & Chuma, 2018). Thus, turning a mandatory SHI for the formal sector into a national health insurance scheme is highly unfeasible unless government pays for the contributions of the informal sector and the poor.

Sustainability

The financial sustainability of the insurance scheme would depend on the revenues it collects and its expenditures on members. If expenditures are accurately projected and appropriate measures taken to manage risk, the scheme's managers can set employee contributions at a level that will guarantee financial viability. In the model shown in Table 2, the scheme would be making losses through the eight-year period if employers and employees each contribute 3% of employee's salary as per international best practice of similar schemes (McIntyre & Meheus, 2013).

Equity

The private sector in Namibia plays a substantial role in health care provision, with the majority of sick and injured insured people choosing to visit private health facilities, which often requires co-payments. An SHI scheme covering care at private facilities may expand access to medical care for the covered employees and reduce the burden on public resources, as currently not all employees have medical aid coverage. However, there is also the potential for increasing inequity in access to and utilization of health care services by solidifying the two-tier health care system – one for the insured and the other for the uninsured. SHI could lead to increasing expenditures at higher-quality private facilities, whilst leaving the unemployed or informally employed majority of the population dependent on free (for those exempted poor), lower-quality care available at public facilities. Even if government provided subsidies for lower-income or informally employed individuals to join the SHI scheme, the move would promote a shift towards provision of care at private facilities instead of at public facilities and experience from Kenya shows that targeting mechanisms for the poor to join a social health insurance is fraught with many challenges (IFC, 2018).

Efficiency

The establishment of a mandatory scheme for both public and private sectors cannot guarantee efficiency in line with the 4.7% administrative costs as in other schemes around the globe (Nicole & Manthaer, 2010). As such, it is likely that there will be substantial costs for capacity development (setting up the system, skills development etc.), which are expected to be more than the 10% assumed in this model. Experience from other schemes in sub-Saharan Africa (e.g. Tanzania and Kenya) shows that administrative costs are over 20% of the total costs (Barasa et al., 2018; Lee, Tarimo, & Dutta, 2018), which is similar to the current administrative costs of PSEMAS (World Bank, 2019).

4.3. Purchasing and Provider Payment mechanisms

Purchasing is when contributions are used to buy or provide appropriate and effective health interventions (Jowett & Kutzin, 2015). As such, paying for results and value for money are considered as important objectives of a well-functioning purchasing system. There are two main purchasing and provider payment mechanisms in the Namibia health system: input-based/line items (with allocations between regions and hospitals made on historical basis) in the public health sector, and fee-for-service in the private health sector.

4.3.1 Introduce alternative payment mechanism: results-based payment

Results-based financing (RBF) is defined as “the transfer of money or material goods from a funder or other supporter to a recipient, conditional on the recipient taking a measurable action or achieving a predetermined performance target (Eichler & Levine, 2009). Within the RBF family, there is performance-based financing (PBF), which is defined as a supply-side RBF strategy that aims at improving the performance of health care providers through the use of explicit financial incentives that are paid for achieving previously negotiated targets (Musgrove, 2011). Currently, several low- and middle-income countries in collaboration with development partners are designing and implementing PBF schemes in order to address some of the issues described above e.g. historical budgets which do not offer strong incentives for delivering sufficient quantity and quality of health

services to improve health systems performance in terms of quality and service utilization. Currently, there are no PBF schemes in the health sector under design or being piloted in Namibia.

Revenue generation potential

PBF does not directly increase revenue for the health sector. The only potential argument for increased revenue from PBF is that by improving the quality of health services and increasing utilization of health services, hence developing a high performing health system, whereby the MOF and development partners might be more open to investing in a functional health care system. However, to date the evidence on the ability of PBF to change service provision and increase use and quality of health services, though growing, is still mixed (Das, Gopalan, & Chandramohan, 2016; Paul et al., 2018; Witter, Fretheim, Kessy, & Lindahl, 2012). For example, PBF was found to increase use of maternal health services, in particular facility-based deliveries, by 23%, 22% and 10.3%, in Rwanda, Burundi and Tanzania, respectively (Basinga et al., 2011; Binyaruka et al., 2015; Bonfrer, Soeters, et al., 2014), it was found to have no effect on maternal health service use in Malawi, Afghanistan and the Republic of the Congo (Engineer et al., 2016; Institute of Public Health, 2016; Zeng, Shepard, Rusatira, Blaakman, & Nsitou, 2018).

Feasibility

Several recommendations have been made endorsing results-based payment as one of the strategies to be assessed in financing health in Namibia (Ministry of Health and Social Services, 2020). This endorsement could illustrate that there could be technical and political will to design and implement PBF. However, currently Namibia's economy is on the decline with reduced general government revenues, increased budget deficits financed through local and international borrowing, and high debts (Ministry of Finance, 2021), which make the design and implementation of a PBF system unfeasible for start-up costs. Furthermore, Namibia already faces serious challenges in the implementation of performance management system in the public sector caused by a number of factors including inadequate technical capacity, insufficient monitoring and evaluation, shortages of supporting policies, poor communication in performance planning and performance reviews, poor feedback on performance and lack of employee involvement in the implementation of the performance management system (Kaupa & Atiku, 2020), which implies that challenges with a PBF system would also be likely.

Sustainability

PBF can be quite costly as it requires additional manpower, training, and infrastructure. Currently, experiences from other countries, such as the Democratic Republic of the Congo, show that PBF national roll-out can require up to 30% of national health expenditure. In Burundi, PBF requires 20% of Burundi's total health budget (Moore & Conteh, 2010). As such, the financial sustainability of PBF option in Namibia is limited, as it might require substantial additional resources, which are currently very limited due to huge budget deficits and high debts in the face of declining economy (Ministry of Finance, 2021).

Equity

Current research on whether or not PBF has positive effects on equity and access is mixed. In Rwanda, for example, RBF was found to result in pro-rich inequities in the use of maternal health services (Lannes, Meessen, Soucat, & Basinga, 2016), whereas another study (Priedeman Skiles, Curtis, Basinga, & Angeles, 2013) found PBF had no impact on reducing inequity between socio-economic groups on maternal services use. In Burundi, one study (Bonfrer, Van de Poel, & Van Doorslaer, 2014) found no differential effects between socio-economic groups on use of maternal health services, while another study (Bonfrer, Soeters, et al., 2014) found pro-least poor inequities of PBF in the use of maternal health services. In Tanzania, Binyaruka and others (Binyaruka, Robberstad, Torsvik, & Borghi, 2018) found that PBF led to a significant increase in the rate of use of facility-based deliveries among women from the poorest and the middle wealth status households, although it had no effect among women in the least poor households.

PBF is also associated with negative outcomes including neglecting services that are not covered under RBF, undermining intrinsic motivations for health workers, encouraging unnecessary services, and engaging in excess provision of services. Each of these potential outcomes can have

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negative consequences on equity and access. This makes it crucial for any RBF scheme to be carefully designed so that adverse effects can be mitigated.

Efficiency

Despite growth in the number of PBF schemes implemented across LMICs and sub-Saharan Africa, few studies have assessed their efficiency or cost-effectiveness and their results are mixed (Borghi, Little, Binyaruka, Patouillard, & Kuwawenaruwa, 2015; Chinkhumba, De Allegri, Brenner, Muula, & Robberstad, 2020; James, Lawson, & Acharya, 2020; Kandpal et al., 2019; Ngack, 2019; Salehi, Borghi, Blanchet, & Vassall, 2020). For example, of the two studies that assessed the cost-effectiveness of both PBF in Zambia and Nigeria, the results show that PBF was cost-effective compared to the status quo purchasing models of health services with no PBF (input-based financing) (Kandpal et al., 2019; Zeng, Shepard, Nguyen, et al., 2018). However, in Afghanistan, PBF was not found to be cost-effective (Salehi et al., 2020).

In terms of efficiency, PBF was found not to be efficient in Tanzania and The Gambia (Borghi et al., 2015; Ngack, 2019). Evidence shows that engaging in PBF may not provide enhanced efficiency due to the numerous reporting structures that are required. Several institutions are typically set up for verification, increased supportive supervision and increased oversight on how facilities are performing, which likely increases administrative costs. This could be the case in Namibia. In addition, while linking payment to outputs/results/performance rather than inputs aims to increase efficiency and confidence among financiers, there is evidence from some sub-Saharan African countries of gaming, which is known as the neglect of non-incentivized services and focus on only incentivized ones, including the possibility of false reporting (Kalk, 2010; Turcotte-Tremblay, Gali-Gali, De Allegri, & Ridde, 2017). As such, in developing any PBF scheme, stringent reporting and management systems need to be institutionalized to mitigate this risk.

4.3.2 Introduce alternative payment mechanisms: Capitation

Capitation is a payment mechanism where a fixed sum is paid per person in advance of the coverage period to a healthcare entity in consideration of it providing, or arranging to provide, contracted healthcare services to the eligible persons for the specified period. By this, the receiver (provider) agrees to provide healthcare services to all those insured/included in that health plan, irrespective of what the actual cost of services would be (Boachie, 2014). The actual cost may be higher or less than the per capita rate collected, which places a mini-insurance role on the provider as it receives a guaranteed “premium” to provide services whose actual cost and value is not initially known (Boachie, 2014).

Namibia faces rising health care costs especially in health insurance schemes, which means that cost containment remains a challenge to the sustainability of these schemes. In theory, capitation can promote cost containment and efficiency gains, but it can also provide an incentive for providers to under-treat and provide poor quality health services thereby negatively affecting overall access to care (Boachie, 2014).

Revenue generation potential

Current global debates show that capitation is being promoted as a preferred provider payment mechanism that can contain healthcare costs (Etiaba et al., 2018). As such, capitation could have revenue generation potential if well designed and implemented through savings that could be realized through cost reductions or containment in service provision.

Feasibility

Evidence shows that it is feasible to introduce capitation in the health sector in Namibia. For example, in a public private partnership run by an NGO (Pharmaccess Namibia) mobile primary care clinics served isolated rural populations using drugs and vaccines provided by the government and operating costs covered by a combination of user fees, monthly capitation payments made by rural employers to cover their workers, donor funding, and local private sector fundraising (Feeley, 2013). Related to this, a pilot project initiated by PharmAccess in 2004 to provide low-cost private health insurance for low-income workers including for HIV/AIDS treatment and care using private sector

insurance companies paid providers based on a per-capita basis instead of a fee-for-service to keep the schemes financially viable (Janssens, Gustafsson-Wright, de Beer, & van der Gaag, 2008).

Although the evidence on the impact of these two initiatives in Namibia is not yet available, evidence from the literature shows that the use of capitation is feasible to control cost escalation, even in lower middle-income countries (Hanvorangchai, 2013). However, introducing such a policy in a public insurance scheme or publicly financed health services, could be controversial in a politically sensitive situation. The experience of Ghana shows that technically framing capitation as a cost-containment strategy with less attention on portraying its health benefits could result in a politically negative reframing of the policy as a strategy to punish fraudulent providers and opposition supporters (Abihiro et al., 2021). This could also happen in Namibia as reports indicate that some health providers in the PSEMAS have been found to be fraudulent (World Bank, 2019), which could make the implementation of capitation unfeasible.

Sustainability

Capitation could be highly sustainable as it could reduce costs of health services provision and make the provision of health services sustainable.

Equity

Evidence shows that the use of capitation in purchasing services targeting the rural communities and low-income households in Namibia in its two pilot projects was highly equitable (Feeley, 2013; Janssens et al., 2008).

Efficiency

The efficiency of the capitation payment mechanism piloted in Namibia shows that it contained costs and ensured viability of the low-cost insurance scheme in Namibia, which enabled a significant number of low-income households to enroll in private medical aid funds (Janssens et al., 2008).

4.3.3 Introduce alternative payment mechanisms: Case-based/Diagnosis Related Groups (DRGs)

Case-based payment, commonly known as diagnosis related groups (DRGs), provide a basis for categorizing services provided to hospital patients according to common categories of patient diagnosis, the treatment provided, and the intensity of the treatment that the patient requires (Boachie, 2014). Each group constitutes a category of a specified uniform level of funding, regardless of the specific circumstances of the case of treatment. Case-based payment methods are mainly implemented to achieve both allocative efficiency (providing hospitals with funding needed to meet demand for appropriate levels of service) and technical efficiency (delivering services at the lowest cost, given a required level of quality).

Revenue generation potential

As case-based payments/DRGs are mainly promoted as an efficiency tool, their revenue generation potential could be realized through allocative, technical and operational efficiency measures, which are often difficult to quantify in monetary terms. Global evidence shows that the health sector loses 20-40% of resources through inefficiency (World Health Organization, 2010). As such, huge savings could be achieved if DRGs are successfully implemented in the hospital setting, which consumes the majority of resources in Namibia.

Feasibility

In Namibia, evidence shows that it is feasible to introduce case-based payments, especially in insurance schemes. Although insurance schemes do not use a fully-fledged case-based payment system, there is some resemblance to a case-based system as NAMAFA publishes billing guidelines and benchmark tariffs linked to procedure codes, which medical aid schemes should use to reimburse health care providers. Evidence from Ghana shows that it is feasible to design and implement a case-based payment system in health insurance schemes (Abihiro et al., 2021).

However, the design and implementation of case-based payments is complex and time consuming, requires reliable data and information systems as it links payment to complexity of case. This is very complicated and requires extensive technical, administrative and managerial skills (Boachie, 2014). As such, very few developing countries, especially in sub-Saharan Africa, have successfully designed and implemented case-based payments.

Sustainability

Case-based payments could be highly sustainable as they could reduce the costs of delivering health services, if well implemented with strong governance regulatory mechanisms.

Equity

Case-based payments could be potentially equitable in Namibia as each health provider will be reimbursed the same tariff for a similar service provided, regardless of socio-economic status of the client. Therefore, there would be no incentive to prioritize services to wealthier population groups.

Efficiency

Case-based payments could greatly control costs in Namibia as all providers would charge the same tariff. However, it would require additional costs for strengthened regulations and supervision.

4.3.4 Contract private providers

In LMICs, the private sector, including international donors, non-governmental organizations, for-profit providers and traditional healers, plays a significant role in health financing and delivery. The use of the private sector in furthering public health goals is increasingly common. By working with the private sector through Public-Private Partnerships (PPP), governments can harness private sector resources to further public health goals (Whyle & Olivier, 2016).

Revenue generation potential

No additional revenues are expected as PPPs have no additional direct revenue potential, but could have savings, if well designed. However, if badly designed, PPPs could lead to additional financial burden to the government.

Feasibility

Namibia has a great potential to contract private providers and it is also feasible to do so. Namibia's potential lies in the existence of a substantial well-developed for-profit industry, which provides over 20% of health services. There is also a substantial number of faith-based organizations, which also play an important role in health care delivery, among others. PPPs may be feasible due to government's commitment to ensuring universal access to primary care for all citizens (reducing inequities in access to basic health services) as renewed in its 2010-2020 National Health Policy Framework and reflected in its positive policy response to proposals of PPPs in the health sector. Furthermore, the government has already made a positive experience with the PPP design and implementation of the Mister-Sister mobile clinics in partnership between the MoHSS, PharmAccess and USAID Shops program, which was rolled out in in three rural regions with the aim of improving geographic access and equity by targeting the poor rural communities and other vulnerable populations, including pensioners, orphans and vulnerable children. The initiative was a considerable success in expanding effective coverage, particularly for the vulnerable. (Synergos Institute, 2014).

Despite such potential and feasibility, large scale PPPs could be challenging in the Namibian context as the context is similar to that of South Africa. Kula and Fryatt (Kula & Fryatt, 2014) have found that despite having strong legislative framework in South Africa and a number of guidelines and tools that have been developed by the South African Treasury for managing partnerships, there is need for the government to have effective regulations in order to oversee quality and standards and to provide stewardship and oversight. Furthermore, Kula and Fryatt (2014) have found that the public sector requires sufficient capacity, not only to manage relationships with the private sector, but also to enable innovation, experimentation, and evaluation as an integral part of all interactions, to learn from successes and to identify any perverse incentives that may lead to unintended consequences. Such capacity might be lacking in Namibia.

Sustainability

The sustainability of PPPs is not guaranteed as it is dependent on the design of the contract itself. Evidence from the Lesotho PPP in the health sector shows that, if the PPP is not well designed in terms of the systems for monitoring of results and the scale and predictability of costs, the costs can become huge to the government and, therefore, unsustainable (Hellowell, 2019).

Equity

Depending on the design, PPPs can be highly equitable as evidenced in the Namibia context with the Mister-Sister Project whereby health outcomes among the poor and the vulnerable greatly improved (Synergos Institute, 2014).

Efficiency

The implementation of functional PPPs could improve both technical and allocative efficiency. However, they could face huge capacity challenges in design and implementation, similar to the PPP model in the Lesotho health sector that came under scrutiny because of its huge financial costs to the government in relation to the benefits (Hellowell, 2019; Webster, Taylor, & Balchin, 2015).

4.3.5 Social contracting

This is a mechanism that allows for government funds to flow directly to Civil Society Organizations (CSOs) to implement activities through a variety of methods, including grants, procurement and contracting and/or third-party payments (Global Fund, 2017). With many of the HIV/AIDS services funded through donors being provided by CSOs as they often have better reach in rural areas and also have established networks with key populations, which the government struggles to specifically target directly due to legal issues (i.e., sex workers), it is important to have social contracting mechanisms in place to ensure the continuity of these services once donors transition their support from Namibia.

Revenue generation potential

There is no direct financial revenue generation resulting from social contracting.

Feasibility

Social Contracting has the potential to build greater governance, accountability and partnership between the national government and CSOs, with CSOs advocating for the government to provide trustworthy, understandable and most importantly focused content. Evidence shows that social contracting is feasible around the globe in countries with similar context to that of Namibia and also in Namibia. For example, the Government of India has been using social contracting mechanisms in its AIDS response for many years, with targeted interventions aimed at HIV prevention among key populations with proven success.

In Namibia, social contracting has been feasible in the health sector whereby CSOs have played a critical role in addressing HIV, TB and malaria, undertaking tasks (e.g., patient follow-up, community initiatives, services for key populations such as sex workers) that government finds difficult to implement (Regional Platform for Communication and Coordination for Anglophone Africa, 2020). To meet the target of the HIV/AIDS National Strategic Framework 2017-2021, Namibia has been implementing the National Strategic Framework activities using a combination of government services and those provided by civil society organizations (Regional Platform for Communication and Coordination for Anglophone Africa, 2020).

Sustainability

Social contracting could be highly unsustainable in the current context in Namibia, where government revenues are low, and the government budget faces huge deficits that are financed by internal and external borrowing.

Equity

The implementation of social contracting in Namibia is highly equitable as most of the services under social contracting target the poor and the vulnerable, especially those in peri-urban and rural areas.

Efficiency

Social contracting could be cost-effective in Namibia, if managed well in terms of expected outcomes and outputs in relation to the investments made. However, it could lead to cost escalation, if implemented in very rural and sparsely populated areas.

4.3.6 Develop and implement geographic resource allocation formula in the public health sector

The best practice in resource allocation for health requires that the central level allocates the recurrent budgets to the peripheral units (regions/districts) based on rational criteria of health needs and capacity to benefit from health care resources. Systems of formula funding intrinsically seek to promote equity, in the sense that all citizens in medical need of a specified service should be able to have equal opportunity of access to that service. These systems simultaneously seek to improve efficiency ensuring that the available national funds are distributed in line with national policy objectives embodied in the chosen approach such as UHC (Smith, 2003). This might include use of a needs-based formula whose principal determinant is the population, weighted by various indicators such as population size, poverty level, cross-boundary flows, private sector service users, age distribution (adjusted by national utilization), gender distribution, mortality profile, and service-related costs.

Revenue generation potential

There is no direct revenue generation potential.

Feasibility

The development and implementation of a geographic resource allocation formula has great potential as the MoHSS is already considering the introduction of a resource allocation formula that would include factors to adjust the population-based allocations with factors including socio-economic differences across the regions (poverty levels), disease burden, and differences in costs of service provision (World Bank, 2019). This could be similar to developed and other upper middle-income countries and would allow for more efficient and equitable allocation of health resources. However, there are factors that could hinder the feasibility. Evidence from some developed countries shows that there could be resistance and opposition from those regions who stand to lose out in the reallocation of the health financial resources (McGuire et al., 2020). Furthermore, it could also lead to inefficiency whereby regions which have low capacity but with greatest need would receive more resources unexpectedly. Thus, a gradual process of reducing the resources from better-off regions to worst-off regions could mitigate some of the potential challenges. Furthermore, making adjustments to the allocation formula using additional factors, such as better performance of the region through service coverage rates or effective coverage rates, could strengthen the formula (World Bank, 2019).

Sustainability

The allocation of health resources to geographic areas using a needs-based formula could lead to predictability in the financing of health services and ensure sustainable provision of health services.

Equity

The design and implementation of a needs-based resource allocation formula could be highly equitable in Namibia as resources could be allocated to where they are needed most.

Efficiency

The design and implementation of a resource allocation formula could be highly efficient in Namibia as resources could be allocated to where they would obtain high value for money. However, it could also be inefficient as more resources might be allocated to regions with the greatest need but with the lowest capacity to use them efficiently.

4.3.7 Introduce price regulation in the private health sector

The use of the fee-for-service payment mechanism has been blamed for the rapid rise of health care costs in the private health sector in Namibia. The use of fee-for-service ensures that financial incentives are based on quantity of services provided, not quality. Hence, most private health providers have direct financial pressure to provide a service whether or not it is needed. Furthermore, private providers are free to charge their own fees for the services rendered, with medical aid reimbursements being guided by NAMAFA tariffs and the fees in excess of the NAMAFA tariffs being payable by the patient, resulting in significant out-of-pocket payments. As such, several recommendations have been made to introduce price regulations to reduce escalating health care costs in the private health sector in Namibia.

Revenue generation potential

There is no direct revenue generation potential. However additional revenues could be realized through savings, which could be ploughed back into the private health care system to increase service coverage or could reduce the risk of catastrophic and impoverishing health expenditures incurred by households due to high co-payments.

Feasibility

Despite huge contributions by government and private employers to PSEMAS and Medical Aid Fund, respectively, health insurance coverage does not protect the insured against paying high out-of-pocket amounts. Namibia has a great potential to deal with this challenge as it already has the regulatory and financial institution, Namibia Financial Institutions Supervisory Authority, which sets the rules of operations of the medical aid funds (MAF). There is also NAMAFA, which controls and coordinates the establishment and functioning of MAFs and publishes billing guidelines and benchmark tariffs linked to the procedure codes that MAFs use to reimburse healthcare providers for services rendered (World Bank, 2019).

However, in terms of feasibility, there appears to be a formidable challenge as providers fail to adhere to NAMAFA's benchmark tariffs, as they are not mandatory (World Bank, 2019). Evidence further shows that the co-payments charged to patients are not regulated and providers are free to charge any level of co-payment in addition to the tariff charged to MAFs (World Bank, 2019). Cost reduction could only be feasible through strong regulation of the private sector by the government. Evidence from high income countries, where similar challenges were also present, show that they have successfully managed to deal with this challenge through a combination of both incentives and strong government regulations. For example, China has successfully used cost-control actions that have had a significant impact on doctors' performance and included limiting average prescription fees for outpatients, limiting the use of examinations/drugs/surgeries, and decreasing in-hospitalization duration (Yan et al., 2019). Another example of strong regulation is from neighboring South Africa, which has used the Regulator, Council for Medical Schemes, which under the medical schemes act amended the medical regulation act to remove all co-payments for medical aid scheme members and their beneficiaries (Helen Suzman Foundation, 2015; Zokufa, 2015). Although there are continued challenges with the amended regulation in South Africa, strong government regulations appear to be the best way of dealing with such challenges of high co-payments.

Sustainability

Cost reduction in the private health sector through reductions in tariffs and co-payments could lead to high sustainability of the funding and pooling mechanisms as the medical aid funds pools would remain solvent, and the non-insured would access lower cost care in the private sector, leading to continued care received by the insured and non-insured clients.

Equity

The current high costs of private healthcare and co-payments are unaffordable and inequitable. Reduction of the high costs of services would greatly improve access to and utilization of health services among the poor.

Efficiency

The current high costs and co-payments at private health facilities are highly inefficient. As such, the reduced costs would greatly improve the technical and operational efficiency of the private health services, leading to greater access to health services.

5. Prioritization of health financing options

Health financing mechanisms can serve as tools to assist the government to effectively achieve progress towards UHC, while simultaneously addressing broader political priorities. The key policy objectives identified in the Namibia health system given the current context and challenges include (1) improved equity in access to and utilization of quality health services; (2) improved efficiency and effectiveness in the allocation and utilization of scarce resources; and (3) equitable mobilization of health financing. It is imperative that the health financing policies and reforms are evaluated for their feasibility in achieving progress towards UHC and their impact on these priorities.

The table below analyses financing option assessed in the section above in relation to the government priorities, feasibility and considers the requirements for implementation. The health financing options are arranged in order of prioritization for each policy objective and are not mutually exclusive. The options are suggested as alternative solutions geared to achieve the three key policy objectives and serve as a range of choices that the Government of Namibia can employ to engage in the necessary policy dialogue for health financing reforms.

Table 4: Analysis of health financing options against policy objectives

Barrier to UHC	Policy objective	#	Description of health financing option and contribution to policy objectives	Opportunities/challenges	Implementation requirements
Parallel health system allows richer population with medical aid coverage to access well-resourced and expensive private health services, while majority of population is reliant on over-burdened public health sector	Improve equity in access to and utilization of high-quality healthcare services	1.	<p><u>Contract private providers through Public Private Partnerships (PPP) for the provision of health services</u></p> <p>With human, health infrastructure, equipment and financial resources skewed towards the private sector, the government can leverage these resources by contracting private providers to provide services to public sector patients, thus ensuring that <i>all patients have equitable access to high quality health services</i> while <i>decongesting the burden</i> and patient load of <i>public health facilities</i>. Contracting of private providers additionally has the potential to result in <i>improved technical and allocative efficiencies</i>.</p>	<ul style="list-style-type: none"> Highly feasible given capacity of well-established private sector and existence of strong government commitment to PPP. PPPs to be provider payment mechanisms that ensure adequate quality of health services and limit potential for exploitation. 	<ul style="list-style-type: none"> Establishment of a PPP unit within the MoHSS with the necessary human and institutional capacity to effectively manage and govern PPPs. Payment mechanisms to private providers to adopt a case-based or capitation system, which has relevant controls to ensure quality of health services.
		2.	<p><u>Social contracting</u></p> <p>The MoHSS can delegate the provision of some services, by contracting NGOs to provide selected services to specific population groups or in specific geographic areas where they often have better established networks. <i>Improved equity</i> can be achieved as most services of <i>NGOs target poor and vulnerable populations living in rural and sparsely populated areas</i>. Social contracting can also result in <i>improved cost-effectiveness</i> given established networks and operations of NGOs in rural areas.</p>	<ul style="list-style-type: none"> Highly feasible in Namibia as demonstrated by Namibia's experience in donors contracting for HIV/AIDS services such as flexible timing of HIV-testing services, care and support etc. Government has limited experience in managing social contracting. Fiscal space constraints of the government given its declines in revenue may limit feasibility 	<ul style="list-style-type: none"> Budget revisions and reprioritisation of government budget required to ensure availability of resources. Establishment of a social contracting unit within the MoHSS with the necessary human and institutional capacity to effectively manage and govern social contracting. Payment mechanisms to private providers to adopt a case-based or capitation system, which has relevant controls to ensure quality of health services.
		3.	<p><u>Introduce price regulation in private sector to manage costs</u></p> <p>MoHSS in collaboration with NAMAf to introduce price regulations for the private health sector to manage escalating and partially exorbitant fees charged for health services in the private sector more effectively. Reduced costs in the private sector will result in <i>improved equity in access</i> as private high-quality health services become more affordable to the poorer populations. In addition, the regulation of prices will result in <i>improved efficiency</i>.</p>	<ul style="list-style-type: none"> Feasible under the mandate of the MoHSS as health sector regulatory body Likely to face resistance from private sector providers 	<ul style="list-style-type: none"> Strengthen regulatory environment by introducing legislation to prohibit co-payments and providing NAMAf the mandate for price regulation and setting Extensive stakeholder engagement and consultation with private

				sector providers to ensure effective roll-out of price regulations. <ul style="list-style-type: none"> Strengthen oversight by MoHSS to ensure compliance with price regulations 	
There is limited cross-subsidization from the rich to poor and vulnerable populations, due to government's limited ability to sustain or increase health spending as a result of the economic downturn	Improve equity in mobilization of health financing	4.	Increase the employee contribution to PSEMAS and reduce government subsidy By increasing the employees' contributions to PSEMAS, it will be possible for the MOF to reduce its subsidy to the scheme. Improved equity is achieved by reducing the government subsidy of the well-off population segment and redirecting the saved resources to other health priorities and improving access to healthcare by low-income groups. Furthermore, it will, to some extent, allow the government to address the misalignment of spending and population coverage between the persons covered by PSEMAS and those reliant on public health services. Linking contributions to salaries will ensure greater equity in revenue collection.	<ul style="list-style-type: none"> Feasible as similar approaches used in other countries and ongoing PSEMAS reform efforts Likely to face some opposition from senior civil servants as it would imply increased upfront payments and a reduction of their employment benefits 	<ul style="list-style-type: none"> Assess alternative scenarios and secure stakeholder consensus on PSEMAS contribution ratios Employee contributions should be linked to salary to reduce regressivity Revenue collected from employees will need to be slightly more than double to ensure long-term sustainability
		5.	Introduce taxes on sugary sweetened beverages (SSB) Increased mobilization of resources for health by dedicating additional tax revenues collected through the tax on SSB to the health sector, which can then be used to increase health spending per person reliant on the public health services . Since the financial burden is expected to be limited on poorer quintiles due to affordability of SSBs, the introduction of this tax is expected to have a progressive impact . Tax is expected to serve as deterrent cost, which will result in health benefits for population.	<ul style="list-style-type: none"> Possible feasible option for revenue generation as evidenced by other countries, including South Africa and Mexico 	<ul style="list-style-type: none"> Requires further investigation of feasibility in Namibian context, particularly focusing on the revenue potential based on consumption & price statistics and assessment of impact on different wealth quintiles Additional political lobbying required to secure necessary support
		6.	Introduce social impact bonds (SIB) for certain health services Social impact bonds can be used as source of financing for certain health services using a type of performance contract that focuses on outcomes, particularly payment by results, in which the public sector partners with private for profit or philanthropic social investors to finance interventions that tackle social problems. SIBs are highly progressive source of financing as the rich finance the services that mainly benefit the poor, particularly those in the public sector to increase health spending per person reliant on the public health services . SIBs could be applied to sustain the government's current level of investment as it faces reduced revenues resulting from the current economic contraction and future economic fluctuations.	<ul style="list-style-type: none"> Possibly a feasible option for revenue generation as evidenced by other countries Potentially inefficient and not cost effective due to significant investment costs 	<ul style="list-style-type: none"> Requires further investigation of feasibility in Namibian context Requires significant investments to build Namibia's technical capacity

		<p>7. <u>Increase government allocation to health</u> By increasing the percent of general government resources allocated to health to fully achieve the Abuja target of 15% allocation to health, the health spending per person reliant on the public health sector would be increased to be more in line with per capita spending levels on persons covered by medical aid funds. Increasing the health spending through tax financing would ensure equitable mobilization of resources due to Namibia's progressive tax system.</p>	<ul style="list-style-type: none"> • Currently not feasible given the decline in government revenues and a large budget deficit financed through already high debts 	<ul style="list-style-type: none"> • N/A
		<p>8. <u>Dedicated VAT for health sector</u> Introduce a new VAT or share newly introduced VAT revenues with the health sector to ensure additional resources are mobilized to increase per capita spending on persons reliant on the public health sector. VAT should be targeted to specific services that are predominately used by higher income groups to ensure progressivity in the mobilization of resources.</p>	<ul style="list-style-type: none"> • Currently not feasible due to government's position that no tax increases will be implemented and the newly introduced VAT on fund managers has limited revenue generation potential. 	<ul style="list-style-type: none"> • N/A
		<p>9. <u>Consolidate resource pools into a mandatory social health insurance scheme:</u> The multiple resource pools of PSEMAS and the various private medical aid funds do not allow for effective risk pooling, limit the diversity of risk pools and result in adverse selection. A mandatory SHI scheme (predominately financed through labour taxes) would result in an increased share of the population (even low-income earners) to be covered by the pooling mechanism, therefore leading to improved equity, especially if contributions are related to the capacity to pay. It may, however, simultaneously result in deepened inequities in access as benefits would be limited to formal sector employees, while the poor and unemployed would remain dependent on overburdened public services. This option will not improve the misalignment of spending versus the population coverage between the medical aid schemes and the government resource pool. The complex and costly administrative structures required to manage a SFI scheme may also result in inefficiencies.</p>	<ul style="list-style-type: none"> • Highly unfeasible and unsustainable as it would require government subsidies to remain solvent 	<ul style="list-style-type: none"> • N/A
<p>Namibia lags behind its peer upper-middle income countries in certain health outcomes (particularly for poor and vulnerable populations) despite its relatively large</p>	<p>Improve efficiency and effectiveness in the allocation and use of scarce resources to maximise health outcomes</p>	<p>10. <u>Implement a resource allocation formula in the public health sector</u> A resource allocation formula can be used to replace the current historical budgeting approach of the MoHSS to ensure that resources are allocated to regions and health facilities according to population size, poverty levels and health needs, thereby achieving improved efficiency and effectiveness in the allocation of resources. Furthermore, the resource allocation formula could be used to guide the allocation resources across program areas and levels of care, which means that allocative efficiencies can be realised as resources are allocated to obtain greater value for money.</p>	<ul style="list-style-type: none"> • Feasible given that draft resource allocation has already been proposed • May face opposition from those regions that stand to lose from the reallocation exercise 	<ul style="list-style-type: none"> • Phased approach to ensure transitioning of gains/losses by regions • Build absorptive capacity of regions that will receive increased allocations.
		<p>11. <u>Introduce case-based/Diagnosis Related Groups (DRGs) payment mechanism</u></p>	<ul style="list-style-type: none"> • Feasible for medical health insurance funds in Namibia as there is already a resemblance of 	<ul style="list-style-type: none"> • Systems for DRG classification of services and

investments in health		Using DRG payments in the private sector, service providers are paid based on the services provided, which are categorized according to common categories of patient diagnosis, the treatment provided, and the intensity of the treatment. Improved efficiency is achieved as costs are controlled and all providers charge the same tariffs. DRG payment mechanisms can also potentially improve equity as each health provider will be reimbursed the same tariff for a similar service provided, regardless of socio-economic status of the client thereby reversing current bias towards the rich.	case-based payment system in the tariff guidelines issued by NAMAF	billing need to be put in place <ul style="list-style-type: none"> Costs for strengthened regulations and supervision need to be managed to ensure cost-effectiveness
	12.	Introduce capitation payment mechanisms Capitation is a payment mechanism whereby a fixed sum per person paid in advance to a healthcare provider in consideration of the provision of contracted healthcare services to the eligible person for the specified period. Capitation is expected to result in improved efficiency as it could contain costs due to low administrative burden. Furthermore, capitation can result in improved equity in pooling of financial resources and access to health services.	<ul style="list-style-type: none"> Highly feasible as cost control measure as evidenced by Namibia's experience with capitation in the pilot "Mister-Sister" project 	<ul style="list-style-type: none"> Requires buy-in from providers and other stakeholders
	13.	Performance Based Financing (PBF) payment mechanisms Under a PBF payment mechanism, providers are paid for achieving previously negotiated targets with the aim of improving the performance of health care providers. PBF mechanisms achieve greater cost-effectiveness and efficiencies in achieving health outcomes. However, PBF could also lead to inequalities in access to and utilization of health services as it could encourage health workers to cherry-pick clients who make it easier to reach the targets and earn incentives. Incentives can be incorporated for programs serving the poor to achieve greater equity.	<ul style="list-style-type: none"> Unfeasible and unsustainable as PBF is costly to set-up and ensure appropriate monitoring 	<ul style="list-style-type: none"> N/A

6. Conclusion

The Namibian health system, in its current state, is sustainable as it is funded from domestic resources with limited contributions from development partners. In comparison to other upper-middle income countries, Namibia has substantial health resources available, meaning that there is no urgent need for additional resource mobilization. Nonetheless, the Namibian government has committed to making progress towards UHC, with a particular focus on three key priorities: (1) improved equity in access to and utilization of quality health services (2) improved efficiency and effectiveness in the allocation and utilization of scarce resources; and (3) equitable mobilization of health financing.

This assessment of the health financing options demonstrates that there are various options available to the Namibian government, which could be employed to achieve these key priorities. The health financing options presented are not mutually exclusive and can be used in isolation or in combination as levers to achieve improvements in the health system and maximize results in relation to the government's priorities. Some of the options require relatively simple reforms that could be implemented in the medium-term, while more comprehensive and complex reforms would require more detailed planning and implementation over the long-term.

As such, health authorities should consider phasing implementation based on the political negotiations required to introduce each reform. Such sequencing is essential as it allows for intra-governmental alignment and buy-in, and time for each of the Ministries involved to prepare for their identified actions while still enabling the MoHSS to play a stewardship role to drive the entire reform agenda.

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8. Annexes

Annex 1: Variables and data used in the Social Health Insurance Model: Combining PSEMAS and Medical Aid Funds

Variable	Value	Data Source
Demographics		
Population of Namibia	205793	
Number of government employees	98225	Ministry of Finance Budget documents 2021/22
Number of private employees	222655	(Namibia Statistics Agency, 2019)
Number of dependents (per employee)	1.11	PSEMAS
Average Monthly earnings		
Government employees	19688	(Namibia Statistics Agency, 2019) - Adjusted to 2021
Private Employees	25272	(Namibia Statistics Agency, 2019) - Adjusted to 2021
Healthcare Utilization		
Number of visits per annum: In-patient	0.11	Study (Moses et al., 2019)
Average length of stay: In-patient	3.8	Study (Cico, Jones, & Musau, 2017)
Number of visits per annum: Out-patient	4.5	Study (Moses et al., 2019)
Health Costs		
Cost of In-Patient services per day (N\$)	3420	Study (Cico et al., 2017) - Adjusted for inflation to 2021
Cost of Out-Patient Care per visit (N\$)	1711	Study (Cico et al., 2017)-Adjusted for inflation to 2021
Administration		
Administrative Cost	0.1	Assumption-half way to current practice - but International best practice =4.7% (Nicole and Manther, 2010)
Reserve	0.03	International best practice
Assumptions		
Employee growth	0.07	(Namibia Statistics Agency, 2019)
Salary growth at 5% annually	0.05	(Namibia Statistics Agency, 2019)
Contribution –government employee	0.03	World Bank 2019
Contribution – private employee	0.03	World Bank 2019
Increase in cost of health care provision (not charges by providers)	0.044	Adjusted inflation from 2016-2020
Reserve	0.03	International best practice

Annex 2: Variables and data used in the Social Health Insurance Model: PSEMAS

Variable	Value	Data Source
Demographics		
Population of Namibia	2057939	
Number of government employees	136571	PSEMAS
Number of dependents (per employee)	1.11	PSEMAS
Average Monthly earnings		
Government employees	19688	(Namibia Statistics Agency, 2019)-Adjusted to 2021
Healthcare Utilization		
Number of visits per annum: In-patient	0.11	Study (Moses et al., 2019)
Average length of stay: In-patient	3.8	Study (Cico et al., 2017)
Number of visits per annum: Out-patient	4.5	Study (Moses et al., 2019)
Health Costs		
Cost of In-Patient services per day (N\$)	3420	Study (Cico et al., 2017) - Adjusted for inflation to 2021
Cost of Out-Patient Care per visit (N\$)	1711	Study (Cico et al., 2017) -Adjusted for inflation to 2021
Administration		
Administrative Cost	0.1	Assumption-half way to current practice - but International best practice =4.7% (Nicole and Manther, 2010)
Reserve	0.03	International best practice
Assumptions		
Employee growth	0.07	(Namibia Statistics Agency, 2019)
Salary growth at 5% annually	0.05	(Namibia Statistics Agency, 2019)
Contribution -government	0.03	World Bank (2019)
Contribution -employee	0.03	World Bank (20 19)
Increase in cost of health care provision (not charges by providers)	0.044	Adjusted inflation from 2016-2020
Reserve	0.03	International best practice