# **GOVERNMENT OF MALAWI**



# **MINISTRY OF HEALTH**

# MALAWI HEALTH FINANCING STRATEGY: TECHNICAL EVALUATION OF OPTIONS

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# **ACRONYMS**

ART Antiretroviral Therapy

ARV Antiretroviral (drug)

CHAM Christian Health Association of Malawi

CMST Central Medical Stores Trust

COMESA Common Market for Eastern and Southern Africa

CSR Corporate Social Responsibility

DFF District Facility Funding

DHMT District Health Management Team

DIP District Implementation Plan

EHP Essential Health Package

EHRP Emergency Human Resource Plan

HSSP Health Sector Strategic Plan

M&E Monitoring and Evaluation

MOF Ministry of Finance

MOH Ministry of Health

NHA National Health Accounts

PBF Performance-Based Financing

PSM Procurement and Supply Management

SADC Southern African Development Community

SHI Social Health Insurance

SWAp Sectorwide Approach

USAID United States Agency for International Development

VAT Value-added Tax

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The Ministry of Health would also like to recognize with gratitude all the members of the Health Financing Strategy Drafting Team who have worked tirelessly to produce this report.

# **EXECUTIVE SUMMARY**

This technical evaluation report is intended to inform development of a new national Health Financing Strategy, which will guide resource mobilisation, allocation, and expenditure through the end of the Malawi Health Sector Strategic Plan (HSSP) in 2016. The report assesses all reform options proposed for the strategy, in order to provide an analytical foundation for decisions about the strategy's direction and content. It analyses the potential revenue for health that could be generated from innovative domestic financing mechanisms while also exploring their feasibility and implications for equity as well as transparency. The report also evaluates proposed reform options for increased efficiency as well as capacity building in the health sector.

The summary of key findings for each assessed option is as follows:

Objective 1: Develop sustainable and predictable sources of revenue to fund

Malawi's health sector needs

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Telecommunications excise	<ul> <li>2013/14: revenue of US\$1–3.5 million</li> <li>Little to no administrative cost</li> </ul>	<ul> <li>Dependent on how excise tax is implemented - political hurdles from Ministry of Finance (MOF), telecom industry, and public</li> </ul>	<ul> <li>Price increases could result, decreasing airtime demand and inhibiting economic growth</li> </ul>	Excise already exists so no additional infrastructure or reporting systems would be necessary
Sin tax (excise on alcohol and cigarettes)	<ul> <li>2013/14: revenue of US\$1.5–5 million for alcohol; US\$1–3 million for cigarettes</li> <li>Little to no administrative cost</li> </ul>	<ul> <li>Dependent on how excise is implemented - political hurdles from MOF, alcohol and cigarette industry, and the public</li> </ul>	<ul> <li>Clear health benefits if price increases and demand decreases</li> <li>Potential economic implications of decreased demand</li> </ul>	Excise already exists so no additional infrastructure or reporting systems would be necessary
Fuel levy	<ul> <li>2013/14: revenue of US\$8–40 million</li> <li>Little to no administrative cost</li> </ul>	<ul> <li>High inflation, unstable fuel supply, and current high fuel prices present challenges</li> <li>Multiple levies are already in place for fuel – difficult to implement new levy unless they are decreased</li> </ul>	<ul> <li>Increased fuel prices could result in reduced income levels, inflation, and decreased demand</li> </ul>	<ul> <li>Excise already exists so no additional infrastructure or reporting systems would be necessary</li> </ul>
	<ul> <li>2013/14: revenue of U\$\$3.5-11 million</li> <li>Some additional operating costs (stricter controls at border posts - e.g. computerised system)</li> </ul>	<ul> <li>Limited visa fees in place (none for US or EU citizens), so little public backlash and little adverse effect on number of visitors</li> <li>Highly sustainable once instituted</li> </ul>	<ul> <li>No adverse effects to equity and access</li> </ul>	<ul> <li>Concerns of corruption at border posts</li> <li>Strict reporting and controls would have to be implemented</li> </ul>

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Trust fund	<ul> <li>Will not generate much revenue by itself</li> <li>If used in conjunction with a visa fee, revenue of US\$5.2 million per year by 2016/17</li> <li>5% operational cost</li> </ul>	<ul> <li>Government and donors may hesitate to provide initial capitalisation - takes years to generate significant returns.</li> </ul>	<ul> <li>No adverse effects. Returns used to ensure continuous funding for critical health services</li> </ul>	<ul> <li>Accumulation of reserves creates the temptation for misuse of funds.</li> <li>Strong institutional checks are needed to prevent imprudent use of funds</li> </ul>
Social Health Insurance (SHI)	SHI scheme covering government employees and 10% of private sector employees breaks even if contribution rates are 9.1% of monthly basic salary	<ul> <li>Lack of health financing capacity and infrastructure</li> <li>Absence of user fees in public health facilities provides little incentive for SHI</li> </ul>	<ul> <li>Formal sector         employees benefit         from greater access         to higher-quality         private facilities</li> <li>Poor or         unemployed would         be dependent on         public and lower-         quality facilities</li> </ul>	Strong oversight structures are critical to ensure effective management of the scheme and to prevent corruption
Corporate health tax	<ul> <li>2013/14: revenue of US\$3–9 million</li> <li>Little to no administrative cost</li> </ul>	<ul> <li>Unfeasible if tax is additional to current 30% corporate tax rate</li> </ul>	<ul> <li>If additional tax is added, foreign direct investment could decrease and corporate profits could fall</li> </ul>	Tax infrastructure already exists so no additional infrastructure or reporting systems would be necessary
Paying wings in central and district hospitals and user fees at district and central hospitals for non-EHP services combined with appropriate health insurance schemes	<ul> <li>2013/14: revenue of US\$20 million for central and district hospitals</li> <li>Large increases to hospital budgets if revenue is retained</li> </ul>	User fees can be contentious and may create public backlash	<ul> <li>Fees can dissuade poorer populations from utilising health services – leading to inequities in care</li> <li>If revenue is retained at the collecting hospital, clear benefits for quality of care and financial sustainability</li> </ul>	System would require improved financial management and reporting systems

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<sup>&</sup>lt;sup>1</sup> Redefining EHP so that it fits within the resource envelop that can be pre-paid and the rest of the non EHP services be paid through other mechanisms such as household direct out of pocket payments and/or health insurance.

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Increase private sector health investments	US\$22 million could be invested in 2013/14	private sector investment is difficult considering slow	<ul> <li>Increase in access and equity through on-site service provision</li> <li>Inequities in access through health insurance, reimbursements, and expansion of private facilities</li> </ul>	Difficult for private entities to be transparent and accountable to the Malawi Government
Earmark funds from int'I/domestic lotteries	<ul> <li>US\$3 million (using Malawi National Lottery) – 10% of lottery revenue</li> </ul>	<ul> <li>Lotteries have proven successful in other African countries</li> <li>However, in the last decade two Malawi national lotteries have failed to generate profits</li> </ul>	<ul> <li>Lotteries can be considered regressive, since low-income individuals may gamble more than higher-income individuals</li> </ul>	• The 2003 Lotteries Act stipulates lotteries are subject to regulation by the National Lotteries Board. If effective, it should mitigate concerns regarding accountability
Strengthen resource generation mechanisms at central and local level	<ul> <li>Collecting taxes from the informal sector is challenging and operationally expensive</li> </ul>	<ul> <li>Malawi already has high tax levels, and further tax increases could hinder long-term economic growth</li> </ul>	<ul> <li>Improved equity if taxes cover all demographics – both formal and informal sector</li> </ul>	<ul> <li>Consistent         enforcement of tax         laws represents an         important measure         of accountability</li> </ul>
Increase absolute funding of donor health investments	It is difficult to determine how much additional donor funding could be obtained	<ul> <li>Receiving donor funding to save lives takes priority in the short term, but the government must carefully plan to assume financial responsibility over time</li> </ul>	how resources are programmed. If allocated to direct	<ul> <li>Depends on reporting requirements of donors</li> <li>Strict controls must be in place so donors can be held accountable</li> </ul>
Lobby MOF to increase health allocation as a share of total government expenditures	<ul> <li>2013/14: If Abuja target of 15% is met, the Ministry of Health (MOH) budget could be US\$142 million</li> </ul>	Convincing Treasury to allocate more funding will be a challenge (typically 11–14% allocation)	<ul> <li>Increased funding would allow the MOH to serve more people and to reach more isolated areas</li> </ul>	The MOH would need to prove through improved monitoring and management systems that resources are being used to achieve impact

# Objective 2: Improve efficiency in how financial resources are allocated, managed, and liquidated

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Strengthen resource allocation processes to increase alignment between actual resource allocations, health needs and HSSP priorities	<ul> <li>Aligning resources to the HSSP will not increase absolute funding, but it can direct more funding to critical areas, optimising use of limited resources</li> </ul>	<ul> <li>Highly feasible. Requires government commitment</li> <li>Coordination between government and donors will ensure long-term sustainability</li> </ul>	resources would increase access and equity, as funds would be directed to areas of patients' greatest need	<ul> <li>Health sector actors often work in silos; working together to invest funds in a strategically coordinated fashion would help increase transparency and accountability</li> </ul>
Maximise distribution and impact of health workers to improve efficiency of service delivery at all levels of care	<ul> <li>No additional revenue</li> <li>Pre-service training currently represents less than 1% of total health sector resources</li> <li>Small incremental investments in pre- service training could increase the number of clinicians</li> </ul>	,	Increasing the number of clinicians would partially alleviate Malawi's severe shortage of health workers and increase patients' access to care	Investments in pre- service training at government-funded training institutions would be open to public scrutiny
Improve disbursement processes from the MOF to districts	<ul> <li>Late disbursements from Treasury present challenges for planning and procurement</li> </ul>	<ul> <li>Regular disbursement of funds depends on Treasury having adequate resources on a regular basis</li> </ul>	<ul> <li>Timely disbursements to districts would ensure the regular availability of drugs and other life- saving services</li> </ul>	<ul> <li>Gaps between government budget commitments and disbursements represent a challenge for accountability</li> <li>Effective tracking of resources is difficult if disbursements are not released on time</li> </ul>
Improve efficiency of the procurement and supply chain system	<ul> <li>Integration of Malawi's parallel supply chains into the Central Medical Stores Trust (CMST) could save US\$11.2 million per year</li> <li>Levels of cost savings will depend on how efficiently CMST is run</li> </ul>	<ul> <li>Reincorporating supply chain management into the national CMST system would greatly increase sustainability of Malawi's drug distribution system</li> </ul>	<ul> <li>Strengthening the national CMST system will promote patient access in the long-term</li> <li>There is a risk that stock-outs may occur as parallel supply chains are merged into CMST</li> </ul>	<ul> <li>Corruption was a concern in the past when CMST was housed under the MOH</li> <li>Donors will closely monitor the drug stocks they provide to CMST to ensure appropriate use</li> </ul>

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Introduce performance-based financing (PBF)	<ul> <li>No direct additional revenue from PBF - potential for increased donor investment if health system is improved</li> <li>PBF is costly. Estimated costs could require a 30% budget increase</li> </ul>	Government has yet to commit any funding to the initiative, making it entirely donor financed	<ul> <li>PBF is often         associated with         improvements in         health outcomes         and service delivery</li> <li>Potential negative         effects include         neglecting services         that are not being         rewarded,         undermining         intrinsic         motivations, and         encouraging         unnecessary         services</li> </ul>	<ul> <li>Increased         accountability and         transparency of         health facilities as         additional reporting         systems and         infrastructure will be         required</li> <li>Possibilities of         gaming and         corruption. Strict         internal controls         need to be         institutionalised</li> </ul>
Strengthen payment/ management system at paying wards to optimise efficiency and profitability	Depending on how prices are set, revenues from paying wards could subsidise free care delivered elsewhere in hospitals	<ul> <li>Treasury is in favour of hospitals retaining their own revenue</li> <li>Potential public backlash if fees increase</li> <li>Sustainable as long as private wings demonstrate competitiveness with private sector</li> </ul>	<ul> <li>Retention of revenue in hospitals could increase the quality of care</li> </ul>	Possibilities of corruption. Strict financial controls would have to be in place
Increase financial independence of health centres	No quantifiable financial gains from making health centres autonomous	Establishing rural hospitals as cost centres is feasible since rural hospitals were already cost centres prior to Decentralisation Act of 1998     Other countries are implementing direct transfers to health centres for some recurrent expenditures     The MOF is already implementing a similar approach under the Primary Schools Improvement programme	• Improvements in efficiency and resource utilisation could lead to increased performance and increase access to and quality of health services.	Introducing direct transfers to health centres and rural hospitals would lead to improved transparency and accountability
Strengthen public- private partnerships to make efficient use of resources	<ul> <li>Not meant to generate revenue, but rather to increase access for less wealthy patients</li> </ul>	, ,	<ul> <li>Voucher system should promote equity by providing poorer demographics access to care</li> </ul>	Open to abuse by chiefs. Vouchers could be distributed based on individuals they favour, rather than those truly in need

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Provide more donor grants directly towards national or district strategic plans	Would improve allocative efficiency and health sector coordination	<ul> <li>Currently, districts are implementing health related activities using the District Implementation Plans (DIPs)</li> </ul>	• The coordinated health intervention and efficiency resource allocation towards those interventions will lead to more equity, efficiency and accessibility	<ul> <li>District Sector wide Approaches (SWAps) will promote transparency and accountability</li> </ul>
Shift and rationalise funding for short- course in-service training to adequately finance pre-service training	<ul> <li>Would make resources available for pre- service training to facilitate training of adequate numbers of clinical officers, medical assistants, nurses, allied health professionals, and physicians</li> </ul>	<ul> <li>Depends on how effectively the policy is implemented and whether government and donors align</li> </ul>	<ul> <li>Would increase the numbers of health care workers and improve per capita ratios of skilled health care workers</li> </ul>	<ul> <li>More skilled health care workers at health facilities would facilitate efficient service delivery</li> </ul>
Explore possibilities for identifying non-nationals in Malawian health facilities and charging fees to them	<ul> <li>Would raise additional resources for the health sector and improve efficiency in resource allocation and utilisation</li> </ul>	<ul> <li>Demand for services by non-nationals is expected to be inelastic even if service charges are introduced</li> </ul>	<ul> <li>This option would also increase resources for the health sector and improve efficiency</li> </ul>	<ul> <li>The option calls for greater transparency and accountability by the system handling funds generated</li> </ul>
Decongest central hospitals by introducing bypass fees	<ul> <li>Could reduce burden on health care workers and financial resources in the central hospitals, improving efficiency and quality of care</li> </ul>	<ul> <li>Currently there are referral systems for patients being referred to central hospitals</li> </ul>	<ul> <li>The system will make health care services available for more critically ill patients at central hospitals</li> </ul>	Government will need to strengthen transparency and accountability of bypass fee collection systems through computerising the system or outsourcing fee collection
Making strategic investments among health or health-related functions	<ul> <li>Could reduce the number of cases due to underinvestment in Social determinants of Health and free some resources consumed by curative care which is more expensive than preventive one</li> </ul>	<ul> <li>There is evidence that curative care consumes a significant proportion of resources and that more investment in preventive care could reduce the demand for curative services</li> </ul>	<ul> <li>This will ensure that all policies have considered all health concerns by every segment of the population</li> </ul>	• Government will have to create an overarching enforcement framework for ensuring that all policies in al sectors take into account health issues of the population

# Objective 3: Generate evidence to develop health financing approaches based on actual needs and costs whilst also building health financing capacity at all levels of the health system

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Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability		
Use resource tracking mechanisms and monitoring and evaluation tools to identify resource gaps and areas of surplus	Health financing     evidence does not     directly generate     revenue, but it can     serve as a resource     mobilisation tool to     convince Treasury and     donors to provide     additional funding	<ul> <li>Health financing tools can be difficult to sustain without technical expertise</li> <li>The National Health Accounts household survey and detailed data collection for resource mapping may be difficult to sustain on an annual basis</li> </ul>	identify gaps in coverage and financing that should be filled – ultimately	<ul> <li>Information is critical for increasing accountability</li> <li>Financing data allow for tracking of resource flows, thereby increasing transparency and accountability of health services</li> </ul>		
Train staff in health financing tools and frameworks so they obtain the skill sets necessary to conduct quantitative and reliable analysis	<ul> <li>Training staff in health financing tools will yield no direct additional revenue</li> <li>Estimated cost of training is US\$143,000</li> </ul>	Government will likely not have the capacity to actually conduct the training; thus external assistance will be needed Cost is not significant. External financing could likely be obtained, as many donors are interested in increasing health financing capacity	<ul> <li>Training finance staff in health financing tools will enable government to better manage resources, identify costs, and allocate more efficiently</li> <li>Resources would be allocated in accordance with disease burden in the most impactful interventions, decreasing drug shortages, improving infrastructure, and advancing patient coverage</li> </ul>	Increasing health financing skills will lead to improved financial management, reporting, costing, and resource allocation		
Ensure that the HSSP is well-costed and is used in budgeting and planning	<ul> <li>No direct additional revenue</li> <li>Increasing the use of the HSSP and conducting a recosting will enable the MOH to properly prioritise, identify resource gaps, and allocate resources efficiently</li> </ul>	<ul> <li>Department of Planning and Policy Development does not have the resources necessary to conduct a re-costing external assistance would be needed</li> <li>For sustainability, Dept. of Planning needs to be intimately involved in the costing so that the knowledge can be institutionalised</li> </ul>	and allocating resources more effectively, wasteful	<ul> <li>Transparency would increase as health needs would be clearly showcased</li> <li>Donors and government would be required to actively show HSSP usage during the planning process - accountability for how programmes are created would be improved</li> </ul>		

Option	Financial Magnitude	Feasibility & Sustainability	Equity & Access	Transparency & Accountability
Analyzing cost- effectiveness of health inventions	<ul> <li>Resources could be directed to most cost- effective interventions and also those that achieve greater health outcomes</li> </ul>	<ul> <li>Depends on availability of personnel skilled in cost-effectiveness analysis</li> </ul>	<ul> <li>Will help direct resources to interventions which have greatest impact on health outcomes, thereby indirectly improving access</li> </ul>	,
Engage partners in central and district planning process, using partner and resource mapping tools for proper rationalisation of budgets	<ul> <li>Would increase available resources for government priorities</li> </ul>	<ul> <li>Would improve cooperation between government and development partners, thereby promoting sustainability</li> </ul>	<ul> <li>Coordinated health interventions and efficiency in resource allocation would lead to equity and accessibility</li> </ul>	Would increase information flows between government and partners

# 1. INTRODUCTION

Malawi faces the challenge of limited financial resources for health. To sustain the public health system and meet Millennium Development Goals 4, 5, and 6, Malawi must mobilise more resources as well as increase the efficiency with which available resources are allocated and spent. In order to address this challenge, the MOH made the development of a national Health Financing Strategy a priority in the Health Sector Strategic Plan (HSSP) for 2011–2016. The Health Financing Strategy is intended to address anticipated funding gaps in an integrated manner, outlining the role that both government and partner organisations can serve.

A Health Financing Task Force was created to lead the strategy's development, and a roadmap was created to develop the strategy in four phases:

- Phase 1: Conducting and drafting of detailed situational analysis, identifying health financing challenges in Malawi, and proposing potential reform options for the strategy
- Phase 2: Technical evaluation of options proposed in Phase 1, including options for revenuegeneration, efficiency, and capacity building;
- Phase 3: Drafting of final Health Financing Strategy;
- Phase 4: Implementation of Health Financing Strategy.

Phase 1 (situational analysis) was completed in September 2012 and highlighted key challenges for health financing in Malawi. The situational analysis report proposed three objectives for the strategy: 1) develop sustainable and predictable sources of revenue to fund Malawi's health sector needs; 2) improve efficiency in how financial resources are allocated, managed, and liquidated; and 3) generate evidence to develop health financing approaches based on actual needs and costs whilst also building health financing capacity at all levels of the health system. The situational analysis proposed numerous reform options under each of the three objectives.

This report covers Phase 2 and is intended to inform stakeholder decisions about which of those options to include in the final strategy. All proposed options from the situational analysis were evaluated using four primary criteria: 1) financial magnitude, 2) feasibility and sustainability, 3) equity and access, and 4) transparency and accountability. Analysis of financial magnitude assesses the quantitative level of revenue or savings that could be created over time. For several revenue generation mechanisms, (e.g. levy on telecommunications, sin taxes, visa for incoming travellers) multiple scenarios were developed and modelled in Microsoft Excel. Analysis of feasibility and sustainability examined the expected level of political will for implementing an option and the presence of appropriate systems for sustainable implementation. Analysis of equity and access allowed for evaluation of impact on people's utilisation of health care services and potential adverse effects on vulnerable populations. Lastly, analysis of transparency and accountability assessed the likelihood that an option might lead to corruption, wastage of resources, or conversely that it might improve availability of information.

This report is organised in six chapters. Chapter 2 details the methodology used for analysis. Chapter 3 provides detailed information on Objective 1, Develop sustainable and predictable sources of revenue to fund Malawi's health sector needs. Chapter 4 deals with Objective 2, Improve efficiency in how financial resources are allocated, managed, and liquidated. Chapter 5 addresses Objective 3,

Generate evidence to develop health financing approaches based on actual needs and costs whilst also building health financing capacity at all levels of the health system. Chapter 6 contains a conclusion and discussion of next steps.

## 2. METHODOLOGY OF TECHNICAL EVALUATION

This report was developed by a technical team selected from the Health Financing Task Force. The team collected and developed information using several methods:

- Financial Modelling: Potential income from alternative financing mechanisms was projected using financial models in Microsoft Excel.
- Interviews: The technical team interviewed key stakeholders in the Ministries of Finance, Health, Economic Planning and Development, and Tourism, as well as District Health Officers, the Malawi Revenue Authority (MRA), the Medical Aid Society of Malawi (MASM), and various companies.
- Literature Review: The technical team analysed documents from Malawi and other countries that have initiated health financing reforms (e.g. Botswana, Ethiopia, Kenya, Lesotho, and Zambia).

Once this information was collected, the team evaluated each proposed option on the basis of four primary criteria: 1) financial magnitude, 2) feasibility and sustainability, 3) access and equity, and 4) transparency and accountability. For financial magnitude, analysis focused primarily on revenue generation potential over time. For several revenue generation mechanisms (e.g. telecom taxes, sin taxes, visa levy) multiple scenarios were developed in financial models. Analysis of feasibility and sustainability examined whether an option was supported by sufficient political will or whether appropriate systems exist for sustainable implementation. Analysis of equity and access explored how each option could affect access and utilisation of health care, as well as whether the option might have adverse effects on vulnerable populations. Lastly, analysis of transparency and accountability examined possible effects on corruption, wastage, and information flows.

# 3. OBJECTIVE 1: DEVELOP SUSTAINABLE AND PREDICTABLE SOURCES OF REVENUE TO FUND MALAWI'S HEALTH SECTOR NEEDS

#### 3.1 INTRODUCE LEVY ON TELECOMMUNICATION

The telecommunications industry is amongst the most profitable industries in Malawi. Not surprisingly then, it is also one of the most heavily taxed, with a 33 percent tax on airtime (compared to the normal 30 percent corporate tax rate), 30 percent tax on ground lines, and a 10 percent excise tax on airtime. The industry has lobbied to lower these tax rates but has thus far been unsuccessful.

The telecom industry's profitability makes it an attractive target for a proposed health levy, since a substantial amount of revenue could be generated without significantly damaging the market or hurting consumers. Unlike other taxes on products sold, excise taxes are typically collected by the retailer or producer and are not paid directly by the consumer like a value-added tax (VAT). Instead, the tax is built into the price consumers pay for the product or service.

Telecommunications services are relatively price elastic in less-developed countries — especially for cellular services—and demand might significantly decrease if prices rise, thereby negatively affecting both the telecommunications industry and consumers (Telecom Paris Tech, 2008). Generally, it is discouraged to increase telecom taxes because of this effect, which can inhibit growth as well as access to information. To mitigate the possibility of such market disruption, it is advisable to earmark a proportion of the current 10 percent excise tax for health rather than institute an additional tax.

#### 3.1.1 FINANCIAL MAGNITUDE

Figure 1 shows the amount of revenue which could be generated either by earmarking a portion of the current telecom excise for health or by adding an additional telecommunications levy. Three scenarios – 1, 2, and 3 percent of the total value of airtime – were used.

Whilst the potential revenue is not particularly large (US\$1–3.5 million in 2013/14) in terms of overall health spending in Malawi² (US\$245.1 million) it would increase the government health budget by a substantial proportion. The 2012 MOH Resource Mapping Exercise captured US\$74 million in projected MOH spending for 2012/13 (not including pooled contributions). If the health excise telecom tax were implemented, and using the 2012/13 MOH financed budget, that budget would increase by 2, 3, and 5 percent based on the respective scenarios. These percentages would increase even more if the telecom industry expands faster than government budgets. Additionally, if this excise tax is earmarked in the current Treasury excise, it would carry no additional financial burden for companies and would have no adverse effects on the consumer. This tax would also take little to no infrastructure meaning no additional administrative cost would be incurred.

<sup>&</sup>lt;sup>2</sup>Calculated based on total Government (Public) Expenditure on Health of 4.3% of GDP for 2012 which was estimated at around US\$ 5.7 billion

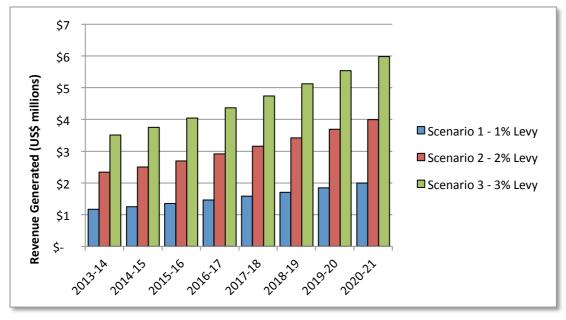


Figure 1. Potential Revenue Generated from Airtime Levy

Source: Analysis by the Health Financing Task Force

#### 3.1.2 FEASIBILITY & SUSTAINABILITY

The implementation of a health levy on telecommunications will face political hurdles. The largest resistance would likely come from Treasury, as a health levy would reduce general government revenues available for allocation to other ministries. Nevertheless, the alternative of increasing the current tax or adding an additional excise tax may be even less feasible. An additional tax would only increase the financial burden on an industry that is already highly-taxed and could result in price increases and as well as public backlash. Any increase will also face heavy resistance from the telecom industry. Since elections are approaching in 2014, it may be difficult to find the political will to support such a measure.

#### 3.1.3 EQUITY & ACCESS

The effects on equity and access will be minimal to non-existent if no tax burden is added. If, however, a health excise tax is added on to the current 10 percent tax, adverse effects on the population will have to be mitigated by discussions between government and the telecommunications industry. Research suggests that price elasticity is usually greater in less-developed countries, and in the specific example of South Africa, greater for cellular services. In institutionalizing any kind of levy, the Malawi Government needs to ensure that the cost of the levy is not passed on to the consumer, especially since poorer populations would be more affected. Telecommunications usage is an important driving force for economic growth (Shiu and Lam 2008). The government would need to work with telecom industries to ensure that price increases are minimal or non-existent so that usage stays constant amongst both citizens and businesses.

#### 3.1.4 TRANSPARENCY & ACCOUNTABILITY

This option would have no immediate impact on transparency and accountability in the health sector. Whilst one could argue that skimming or fraud from an excise tax could occur, a 10 percent excise tax already exists, meaning little to no additional infrastructure or reporting systems would be necessary.

# 3.2 INTRODUCE LEVY ON ALCOHOL/TOBACCO (SIN TAXES)

Levies on alcohol and tobacco have generated significant revenue in several countries around the world. The most notable example is Botswana, which institutionalised a 40 percent levy on alcohol, with 45 percent of revenues allocated to the Ministry of Youth, Sport and Culture; 10 percent to the MOH; and 45 percent to the Government Consolidated Fund. This levy, over a period of 1.5 years (August 2009 to January 2011) generated US\$79 million dollars. The levy was introduced not only to generate revenue, but also to combat large increases in alcohol consumption and alcohol-related deaths (Sebonego 2011).

Currently the alcohol/tobacco industry in Malawi is heavily taxed. Alcohol products carry an average excise tax of 100 percent, with a range of 0–250 percent. For cigarettes, the average excise tax is 90 percent. Like the telecom tax, the excise tax for health can either be taken from the existing levy on these products or it can be additional. If the government decides to make it a national priority to curb alcohol and cigarette consumption, imposing an additional levy would be a natural choice.

#### 3.2.1 FINANCIAL MAGNITUDE

The potential revenue from excise taxes on both cigarettes and alcohol companies appears considerable – especially if paired together. As shown in Figure 2, three scenarios were developed, in which a 10, 20, and 30 percent excise tax on both domestic and imported products was developed. In total, the tax has the potential to raise US\$1.5–5 million in 2013/14.

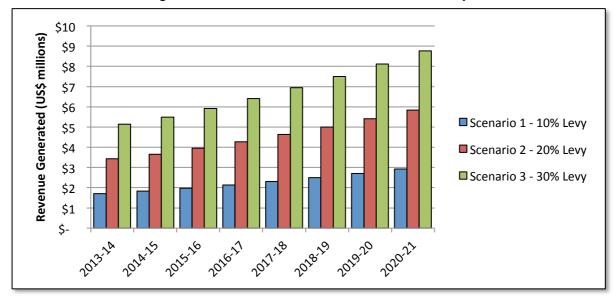


Figure 2. Potential Revenue Generated from Alcohol Levy

Source: Analysis of Health Financing Task Force

The same scenarios which were applied for alcohol were also applied to cigarettes. If an excise were applied on both domestic and imported cigarettes, revenue potential ranges from US\$1 to US\$3 million in 2013/14 (Figure 3). It should be noted that imported cigarettes make up an estimated 85–90 percent of this total as there is little domestic production of cigarettes in Malawi. If sin taxes were applied on both cigarettes and alcohol in 2013/14, US\$2.5–8 million could be raised for health. And like the telecom levy, there would be little to no additional infrastructure needed since an excise

levy already exists. As no added reporting structure will be necessary, there would be no operating or administrative cost to run the tax.

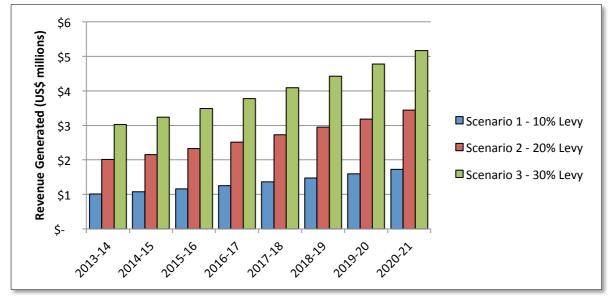


Figure 3. Potential Revenue Generated from Cigarette Levy

Source: Analysis of Health Financing Task Force

#### 3.2.2 FEASIBILITY & SUSTAINABILITY

Adding an excise tax for health on top of current taxes might be politically challenging. The alcohol and tobacco industries will likely oppose any additional excise, and the tobacco industry in particular carries significant clout, as it contributes a large proportion of Malawi's GDP. Higher taxes would force companies to increase prices, and whilst alcohol/cigarette consumption is relatively price inelastic, demand could potentially fall.

Regardless, the business case for instituting a health tax on products that are considered harmful to health is easier to sell to government and the public. Smokers and drinkers will eventually have a greater need for health services and should thus pay more into the health system. Additionally, decreased demand for both tobacco and alcohol would have tangible health benefits for the population.

#### 3.2.3 EQUITY & ACCESS

One of the key benefits of a sin tax is that there are no clear negative implications on the population. Even if a sin tax increased alcohol and tobacco prices and resulted in a demand decrease, one could argue that the resulting behaviour change would have a positive effect on the community (decreased crime, alcohol-related deaths, abuse, and cancer).

The only actors that would be negatively affected (and only if an additional tax is levied rather than taking an allocation of the current tax) are the brewing and tobacco companies. If additional taxes were levied, demand might decrease, lowering corporate revenues. For example, SABMiller's Botswana subsidiary, Sechaba Brewery, recorded a 27 percent drop in sales when the levy first was institutionalized (Chomba 2009).

#### 3.2.4 TRANSPARENCY & ACCOUNTABILITY

This option would have no direct impact on transparency and accountability in the health sector. An excise tax already exists on both alcohol and tobacco, so no new systems would be instituted.

#### 3.3 INTRODUCE FUEL LEVY EARMARKED FOR HEALTH

Table 1 lists the levies on petrol, diesel and paraffin that existed as of December 2012. The levies are: 1) Energy Regulatory Levy; 2) Road Levy; 3) MBS Levy; 4) Rural Electrification Levy; 5) Storage Levy; and 6) Price Stabilisation.

Levy Type	PETROL	DIESEL	PARAFFIN		
Energy Regulatory Levy	0.37%	0.38%	0.46%		
Road Levy	6.49%	5.75%	0.00%		
MBS Levy	0.11%	0.11%	0.15%		
Rural Electrification Levy	4.50%	4.50%	5.41%		
Storage Levy	0.93%	0.96%	1.15%		
Price Stabilisation Fund	8.50%	6.56%	7.89%		
Road Tax*	1.7%	1.7%	0.00%		

Table 1. Existing Levies on Fuel, December 2012

Due to fuel's demand-inelastic nature and revenue-generating potential, a levy earmarked for health could create significant resources for the MOH. The current pricing could likely accommodate an added levy, and even if prices were to slightly increase, demand would not decrease considerably. Regardless, if a levy were instituted, government should implement a plan to ensure that no drastic price increases result. Since fuel is a necessary commodity for development and growth, any decrease in demand needs to be mitigated. And as with all options proposed in this report, the tax could be taken as a portion of the current levy or instead added as an additional percentage on top of existing rates.

#### 3.3.1 FINANCIAL MAGNITUDE

The revenue from a fuel levy for health has the potential to be significant. In the model developed, three scenarios were applied in which a 1, 3 and 5 percent levy was instituted for every liter of petrol, diesel and paraffin purchased. In the first year alone, US\$8–40 million could potentially be generated (Figure 4). An estimated 59 percent of this revenue would come from diesel, 35 percent from petrol, and 6 percent from paraffin. In these scenarios, it was assumed the demand growth for paraffin and petrol would increase by 5 percent and diesel would increase by 10 percent (National Oil Company of Malawi 2012). It was also assumed based on of estimates from the National Oil Company that fuel prices will increase by 20 percent annually due to inflation and the need to purchase fuel with foreign currency. If this were to change significantly (most likely downwards), the revenue for future years will decrease. It should also be recognised that no additional administrative costs would be necessary since a number of levies and reporting structures already exist.

<sup>\*</sup> A road tax of MK12 per liter representing 2% of the current fuel price per liter was added on fuel in December 2012.

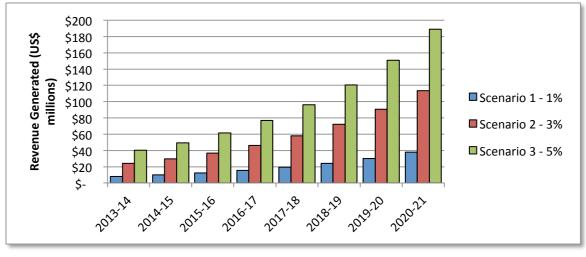


Figure 4. Potential Revenue Generated from Fuel Levy

Source: Analysis of Health Financing Task Force

Such additional resources generated could have numerous positive effects on the health system. In terms of budget augmentation, the MOH-financed budget could increase by 11, 33, and 54 percent, depending on the magnitude of the levy, in the first year. In a resource-constrained environment with such a heavy reliance on external resources, such increases could alleviate gaps in essential medicines, infrastructure, and commodities. For instance, the Malawi government relies on donors for all funding of antiretroviral drugs (ARVs). This puts the government at risk if a donor withdraws or a grant is not renewed. Another alternative would be to allocate resources to primary, secondary, and tertiary commodities as district and central hospitals constantly face shortages.

#### 3.3.2 FEASIBILITY & SUSTAINABILITY

Whilst a 1–5 percent levy appears low, the imposition of fuel levies could be politically and socially unwelcome as Malawi is already experiencing the effects of high inflation and devaluation of the Malawi kwacha. Since an automatic fuel pricing mechanism exists – the price of fuel changes automatically when there is a change in the world markets and the exchange rate – fuel prices have increased significantly. Compounding this situation, a road tax of MK12 per litre (representing 1.7 percent of diesel and petrol price per litre) of diesel and petrol has just been imposed. This has led to public discontent, especially since the country has been faced with unpredictable fuel shortages due to inadequate forex and a weak supply chain. Lastly, collecting revenue for existing levies from importers of fuel has been difficult, with government and importers locked in disagreement. In order for a health levy to be feasible, this would need to be remedied.

Regardless, consideration should be given to the imposition of a health levy. For example, current levies could be decreased by small percentages (1–2 percent) to accommodate a new levy. This would be based on the understanding that health, roads, and rural electrification are all key priorities of the country and all of them face absolute inadequacy of financial resources but deserve to be developed using locally generated resources.

#### 3.3.3 EQUITY & ACCESS

If prices were to rise on fuel to offset the imposition of a new levy, there could be adverse effects on the poor. Increased fuel prices could result in reduced income levels, inflation, and a lower demand for fuel. This could stymie transportation and business growth and have a direct and adverse impact on health care access as transportation to health facilities becomes prohibitively expensive. Due to the potential consequences, careful consideration needs to be taken in order to ensure that fuel prices do not rise.

Nevertheless, the revenue potential from a fuel levy is high, and these resources could be allocated to critical health commodities, medical equipment, and infrastructure. This would improve health access, delivery of health services, and mitigate drug supply shortages.

#### 3.3.4 TRANSPARENCY & ACCOUNTABILITY

This option would have no direct impact on transparency and accountability of the health sector. Whilst one could argue that possibilities of skimming or fraud could exist, current levies already exist for fuel, meaning little to no additional infrastructure or reporting systems would be necessary.

#### 3.4 INTRODUCE A RECIPROCAL VISA FEE FOR INCOMING TRAVELLERS

In Malawi, visa fees are charged to visitors coming from South America, Asia, the Far East, and other African countries that do not belong to the Southern African Development Community (SADC) or Common Market for Eastern and Southern Africa (COMESA). Conversely, visitors from the United States, European Union, and SADC or COMESA member states are exempted from the fee.

Growth in numbers of international visitors to Malawi has decreased over the past several years. In 2005, Malawi saw an annual increase of 46 percent in international visitors. However, annual growth shrank to 3 percent in 2010, and then to 1.5 percent in 2011 and 2012. These significant drops were partly due to political issues with the previous government.

As shown in Figure 5, most international visitors to Malawi come from SADC and COMESA - 35 percent and 25 percent respectively. Visitors from Europe follow at 15 percent and visitors from the United States and other African countries each make up another 10 percent. Those from Asia and the Far East make up the remainder.

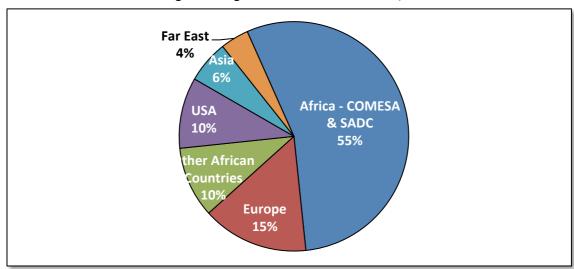


Figure 5. Origin of Visitors to Malawi 2010/11

Source: Ministry of Tourism 2011

It should be noted that the idea of instituting a visa fee for health is not new. It is currently being considered in Zanzibar to fund malaria programmes. The Zanzibar MOH estimated that in 2012/13 alone, 35 percent of national malaria control efforts could be funded this way – increasing both financial sustainability and autonomy of the programme (Zanzibar Ministry of Health 2012).

#### 3.4.1 FINANCIAL MAGNITUDE

The sharp decline in international visitors over the past several years makes it difficult to predict how many visitors will come to Malawi in future years. In the scenarios developed, a conservative estimate of 1.5 percent annual growth in visitors was used, based on the global outlook, past data, and poor economic prospects. Regardless of limited growth, the revenue potential is quite large. Three scenarios were developed in which a US\$10, US\$20, and US\$30 levy was charged for health. Visitors from SADC and COMESA countries were excluded. In these scenarios, revenue potential ranged from US\$3.5 to US\$11 million for 2013/14 (Figure 6). There would be little administrative cost in imposing a health visa, as much of the infrastructure and staff is already in place. However, a computerised system should be installed in order to strengthen reporting and mitigate the risk of corruption. Additionally, a health visa would require the creation of a special account for the MOH in which revenue would be deposited by the Immigration Department.

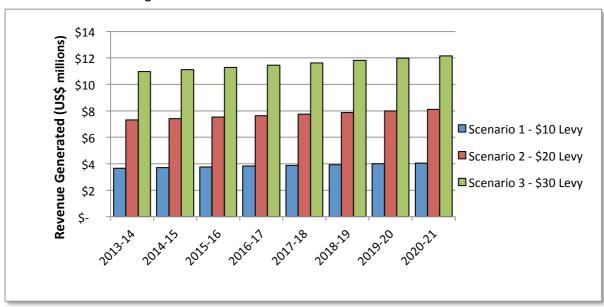


Figure 6. Potential Revenue Generated from Health Visa Fee

Source: Analysis from Health Financing Task Force

Any visa levy should also be calculated using U.S. dollars as a benchmark. By doing this, visa fees in kwacha will fluctuate depending on the value of the dollar. As Malawi is experiencing high inflation, this is crucial. Otherwise, that is, if a flat kwacha rate is used, the levy would become less valuable as inflation rises.

#### 3.4.2 FEASIBILITY & SUSTAINABILITY

It is unlikely that the imposition of visa fees would have a negative effect on tourism and international travel to Malawi. The majority of countries in the region already charge large visa fees. Table 2 illustrates a sample of countries and the visa fees they charge for U.S. citizens.

#### **Table 2: Sample of Six Countries Charging Visa Fees**

#### 3.4.3 EQUITY & ACCESS

This visa levy would have no adverse effects on equity and access. As explained earlier, it is highly unlikely that there would be any decrease in international visitors if a fee were imposed. Thus there would be no negative impact on certain demographics, economic growth, or health.

Country	Visa Fee for U.S. Citizens
Tanzania	US\$100
Ethiopia	US\$70
Mozambique	US\$60
Zambia	US\$50
Kenya	US\$50
Zimbabwe	US\$30

#### 3.4.4 TRANSPARENCY & ACCOUNTABILITY

If a health levy were imposed, there is potential for corruption – primarily at border posts. Currently, few controls are in place. A computerised system and strong supervisory system should be established, as this would mitigate the risk of corruption.

#### 3.5 INTRODUCE A TRUST FUND TO FINANCE A SPECIFIC HEALTH EXPENSE

A trust fund allows a country to reserve a pool of funding for a specific purpose, whilst at the same time generating returns from the accumulated capital. Though trust funds rarely generate large amounts of revenue by themselves, they can be used as a tool to manage revenues from other income-generating mechanisms, creating a self-sustaining income stream.

Zimbabwe's National AIDS Trust Fund may be the most successful example of a national trust fund for health. Through a 3 percent tax on formal-sector employees and businesses, the fund raised US\$21 million in 2010 and US\$26 million in 2011 for the national HIV/AIDS response. However, the 3 percent tax generated significant public resentment, as taxpayers initially doubted government's ability to appropriately manage the fund's resources. Only with later governance reforms did public perception of the trust improve, and it is now considered a valuable support mechanism by even the political opposition.

The purpose of a Malawi trust fund would need to be clearly defined, since vague objectives could increase the possibility of financial malfeasance. Earmarking returns to the procurement of ARVs or other specific commodities would help ensure appropriate use of funds, as expenditure could be closely tracked. Targeted allocation might also lessen Malawi's dependence on external aid for key health commodities. At present, donors provide 92 percent of all funding for health commodities (Figure 7), leaving patients exposed to the risk of treatment interruption when donors withhold funding or shift priorities. The fund could provide a stable source of funding for commodities and might be used as a reserve of last resort if a donor should freeze funding.

Strong governance structures are critical for a trust fund. Constant temptation will exist to deplete the trust fund's resources, and strong institutional checks are needed to prevent imprudent spending. The fund's bylaws should specify the percentage of returns that can be spent in a given year. In addition, they should contain clauses determining exactly how funds will be used, with exceptions allowed for pre-defined emergency situations. The board of trustees should include a diverse range of stakeholders who have direct oversight of the fund's management team.

Total funding for ■ Government Donors commodities Neglected Tropical Diseases\* \$0.004 M \$0.005 M \$0.009 M **Tuberculosis** \$0.3 M \$1.1 M \$1.4 M Nutrition \$0.4 M \$6.5 M \$6.9 M Malaria \$23.0 M \$0.9 M \$22.1 M **HIV Including STIs** \$0.2 M \$83.0 M \$83.2 M Vaccines \$27.5 M \$0.005 M \$27.4 M Family Planning \$0 \$6.0 M \$6.0 M 0% 20% 40% 60% 80% 100% % of total commodities funding

Figure 7: Proportion of Commodities Funded by Government and Donors, FY 2012-13

Source: MOH 2011a

The financing structure of trust funds can vary substantially, and Malawi must consider which model best matches its needs. Four key questions should be considered:

#### 1. Initial capitalisation

Though not required, a large upfront capitalisation will provide immediate resources to begin investing. This one-time grant may come from government, a donor, or a company. Once invested, the initial investment can become self-sustaining as returns are generated. However, funding the initial capitalisation can be challenging, since the government may hesitate to sink resources into an investment that takes years to generate results. Given this challenge, donor financial assistance might be a more feasible way to raise start-up funding for a trust fund. A donor could provide initial financing either as a loan or an outright grant, with the requirement that it play a role in the trust fund's governance.

#### 2. Revenue collection

Though a fund can generate small returns by simply investing its initial capital, earning potential will be much greater with additional recurrent contributions. The possibility of a Malawi trust fund should be considered in close conjunction with other possibilities for increased revenue generation such as a visa tax on incoming travelers or a fuel levy. These revenue-generation mechanisms could provide a stable source of income for the fund.

## 3. Investment strategy

The trust fund's investments would need to be conservative, given its objective to provide stable, long-term financing supporting life-saving services. Investments could be made in domestic as well as foreign government bonds. Foreign bonds represent a safer investment,

but they would generate lower returns – likely below 5 percent. On the other hand, investing in domestic bonds would generate much greater returns, albeit with greater risk.

#### 4. Spending of proceeds

Given the political and ethical imperative to spend proceeds immediately, the trust fund could be designed so that a large proportion of income is spent each year. Depending on the fund's objective, spending could be managed either by an independent board of trustees or a government entity such as the MOH or the National AIDS Commission.

With an initial capitalisation of US\$10 million, a trust fund receiving 50 percent of revenues from a visa tax on incoming travelers could yield over US\$5 million annually for health expenditure within three years (assuming 4.5 percent annual returns on investment and no payouts until the fourth year of operations) as shown in Table 3.

Table 3. Projected Income, Expenses, and Payouts of a Trust Fund Receiving Income from a Visa Tax

	2013/14	2014/15	2015/16	2016/17	2017/18
Opening balance	US\$10,000,000	US\$15,823,819	US\$21,977,550	US\$28,476,513	US\$30,097,968
Returns to	US\$450,000	US\$712,072	US\$988,990	US\$1,281,443	US\$1,354,409
investment					
Income from visa	US\$5,396,319	US\$5,477,263	US\$5,559,422	US\$5,642,814	US\$5,727,456
tax					
Administrative cost	US\$22,500	US\$35,604	US\$49,449	US\$64,072	US\$67,720
Payouts	-	_	_	US\$5,238,730	US\$5,539,405

A visa tax on incoming travellers is just one example of a revenue-generating mechanism that could be instituted in tandem with a trust fund. Other mechanisms, such a fuel levy, an airtime tax, or sin taxes, could also be used to create income for a trust fund. It should be noted that without a large stream of annual income, a trust fund cannot generate substantial revenue. Maintaining all the same assumptions from Table 3, the payouts from a trust are small in the absence of annual income from a mechanism such as a visa tax as shown in Table 4.

Table 4. Projected Income, Expenses, and Payouts of a Trust Fund without Revenue-generating Mechanisms

	2013/14	2014/15	2015/16	2016/17	2017/18
Opening balance	US\$10,000,000	US\$10,427,500	US\$10,873,276	US\$11,338,108	US\$11,431,374
Returns to	US\$450,000	US\$469,238	US\$489,297	US\$510,215	US\$514,412
investment					
Administrative	US\$22,500	US\$23,462	US\$24,465	US\$25,511	US\$25,721
costs					
Payouts	-	-	-	US\$391,438	US\$408,172

#### 3.6 INTRODUCE SOCIAL HEALTH INSURANCE

Social health insurance (SHI) is a form of pre-payment intended to pool risk and protect beneficiaries from catastrophic health care expenditure, (Acharya, et al. 2012) 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.

Malawi is currently committed to providing core medical services, in the form of the Essential Health Package (EHP), free of charge to all citizens. Accordingly, the most recent National Health Accounts (NHA) exercise shows that household out-of-pocket expenditure represented just 11.2 percent of total health expenditure in 2008/09. This is substantially lower than the average household out-of-pocket expenditure in low-income countries, which has been estimated at 52 percent of total health spending, suggesting a comparatively low burden of out-of pocket expenditure in Malawi (WHO 2005)As a result, reducing out-of-pocket expenditure may less of a priority in Malawi than it is in other low-income countries. However, SHI has been repeatedly proposed as a method to increase health sector revenue in Malawi.

For this report, the financial impact of an 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. In this analysis we assume complete coverage of government and private sector workers.

#### 3.6.1 FINANCIAL MAGNITUDE

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 an SHI scheme depends on the mechanisms by which the insurance scheme creates revenue and manages it. If not carefully managed, an SHI scheme can quickly become a loss-making entity that requires continuous life support from government.

The scheme would collect revenue through an automatic contribution from members' salaries. As shown in Table 5, the scheme would just break even if each member's contribution represented 9.1 percent of both employer and employee monthly contributions. If contribution levels were set at less than 9.1 percent, the scheme would run a loss and would require government grants to be sustainable.

Table 5. Health Insurance Expenditure and Revenue (in millions)

Total Expected Contributions								
Per Annum (million MK)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Government – both employer								
and employee (9.1%)	990.37	1,112.98	1,254.23	1,416.58	1,581.02	1,784.81	2,017.69	2,265.54
Private – both employer and								
employee (9.1%)	2,090.82	2,249.64	2,480.46	2,675.49	2,946.75	3,169.36	3,496.10	3,759.53
Total Annual Contributions								
(million MK)	3,081.19	3,362.61	3,734.6	4,092.0	4,527.7	4,954.1	5,513.7	6,025.0
Expected cost for inpatient per								
annum (million MK)	64.56	69.17	75.41	81.13	88.10	94.65	103.40	110.94
Expected cost for outpatient								
per annum (million MK)	2,695.25	2,887.88	3,148.26	3,386.86	3,677.99	3,951.41	4,316.82	4,631.35
Administrative cost (estimated								
@10%)	308.12	336.26	373.47	409.21	452.78	495.42	551.38	602.51
Reserve (estimated @ 3%)	92.44	100.88	112.04	122.76	135.83	148.63	165.41	180.75
Total Expenditure for Scheme								
(million in MK)	3,160.37	3,394.19	3,709.1	3,999.9	4,354.7	4,690.1	5,137.0	5,525.5
Balance of Fund								
(surplus/deficit in million MK)	(79.18)	(31.58)	25.51	92.12	173.07	264.07	376.78	499.53
Balance of Fund								
(surplus/deficit in US\$)	(264,000)	(105,000)	85,000	307,000	577,000	880,000	1,256,000	1,665,000

#### 3.6.2 FEASIBILITY & SUSTAINABILITY

Managing a national 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 Malawi already suffers from a number of capacity constraints, and managing an SHI scheme would present further challenges.

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 above in Table 5, the scheme would create additional revenue if employers and employees contribute at least 9.1 percent or their salary. This is a considerable percentage of income to contribute on top of the contributions already made to the health care sector in the form of income tax.

## 3.6.3 EQUITY & ACCESS

The private sector in Malawi plays a relatively minor role in health care provision, with only 10.7 percent of sick and injured people choosing to visit a for-profit or Christian Health Association of Malawi (CHAM) facility which requires payment of user fees for some or all health services (National Statistical Office 2012). An SHI scheme covering care at private facilities may expand access to medical care for covered employees and reduce the burden on public resources. However, there is also the potential for increasing inequity in access to and utilisation of health care services by creating a two-tier health care system – one for the insured and the other one for the uninsured. SHI could lead to increasing expenditure at higher-quality private facilities whilst leaving the unemployed or informally employed majority of the population dependent on free, 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.

#### 3.6.4 TRANSPARENCY & ACCOUNTABILITY

As noted above, institutional capacity is crucial for an SHI scheme. Strong oversight structures are critical to ensure effectively management of the scheme and to prevent corruption. The SHI scheme could be established as a government parastatal, with a mixed Board of Directors including individuals from government, civil society, and the private sector.

Related to this, about half (47 percent) of total household direct out-of-pocket spending was on public health facilities (central and district hospitals and health centres; only central hospitals private wings charge fees) which are expected to provide free health care services – signalling existence of under-the-table payments.<sup>3</sup> Further analysis is needed to determine present levels of out-of-pocket expenditure as well as the providers to which these amounts are paid and which socioeconomic group pays these direct-of-pocket payments. Key questions that need to be answered include:

<sup>-</sup>

<sup>3</sup> In the Kyrgyz Republic, a key objective of the reforms introduced in 1997 (compulsory health insurance fund) has been to replace the burgeoning system of unofficial informal payments for health care with a transparent official co-payment, thereby reducing the financial burden of health care spending for the poor (Falkingham et al. 2009).

- Which segments of the population are contributing the greatest proportion of out-of-pocket expenditure?
- What costs are out-of-pocket expenditure directed towards transportation, medicines, food, or user fees at public, private, and CHAM facilities?

#### 3.7 INSTITUTE CORPORATE TAX FOR HEALTH

Malawi's current corporate tax rate is 30 percent, which is lower than the rate in neighbouring countries like Zambia (35%), Mozambique (32%), Zimbabwe (30.9%), and South Africa (36.89) but similar to Tanzania's and Kenya's tax rates both also at 30% (KPMG 2013). As health is a national priority and can directly impact economic growth and productivity, a "health tax" could be seen as corporations' contribution towards ensuring that Malawi has a healthy and productive population. Many countries (Britain, South Africa, Ghana, etc.), whilst not instituting a general tax for health, do fund nationwide insurance schemes through additional taxes. As Malawi has a public health system in which medical services are offered free of charge, it is reasonable to expect that companies should in some way contribute additional resources to the health system.

Nevertheless, an increase in taxes (rather than taking a portion of the current tax rate) could affect foreign direct investment. Malawi already suffers from a shortage of foreign direct investment (US\$92 million) compared to Zambia (US\$2 billion) in 2011. If the rate were to increase, internal and foreign investors could be discouraged from expanding or developing new business.

#### 3.7.1 FINANCIAL MAGNITUDE

In Figure 8, three scenarios were used – a 1, 2, and 3 percent corporate tax devoted to health – which could either be taken from existing rates or added to rates as an additional corporate tax. Using these scenarios, the earmarked tax would generate between US\$3 and US\$9 million in 2013/14. The 2012 MOH Resource Mapping exercise captured US\$74 million in projected government health funding (not including pooled contributions) for 2012/13. If the health corporate tax were implemented, using the 2012 budget as a baseline, the MOH budget would increase by 4, 8, and 12 percent based on the scenarios used. This tax would be relatively simple to implement and would require little to no additional infrastructure as many of the mechanisms are already in place.

Furthermore, if the tax is taken as a percentage of the current rate, there would be no financial impact on companies. General government revenue distributed across ministries would decrease, but only by a marginal amount. With respect to each scenario, total government revenue (including VAT, excise, other taxes, etc) would drop by an estimated 0.6, 1.2, and 1.8 percent annually.

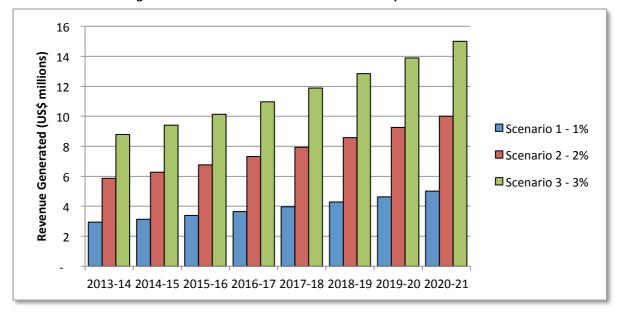


Figure 8. Potential Revenue Generated from Corporate Health Tax

#### 3.7.2 FEASIBILITY & SUSTAINABILITY

Earmarking a portion of the current corporate tax for health would require approval from the MoF. Whilst the percentage that would be taken is small compared to the MoF's entire revenue base, a strong case would need to be made to illustrate tangible health and economic outcomes.

Nevertheless, it would be even more challenging to make the health tax additional to the existing 30 percent corporate tax. Any additional tax would not only face resistance from Treasury but also from businesses. As Malawi's economy is experiencing slow growth, the government should carefully evaluate whether increasing the tax rate is appropriate and would not significantly hinder investment and economic growth.

#### 3.7.3 EQUITY & ACCESS

If an additional health tax is added on top of the existing 30 percent tax, there could be negative implications for equity. Corporate profits could fall, potentially resulting in fewer jobs and services/products being available. At mentioned above, in no way does Malawi want to stymie economic growth given the current economic circumstances.

However, additional revenue from this tax would enable the government to direct funding to identified gaps such as essential medicines and infrastructure. This would enable greater access to medicines, improve treatment coverage, and improve medical infrastructure.

# 3.7.4 TRANSPARENCY & ACCOUNTABILITY

This option would have no direct impact on transparency and accountability of the health sector, other than the MOH having to potentially illustrate better accountability as to how redirected Treasury revenue would achieve better health outcomes.

3.8 STRENGTHENING PAYING WINGS IN CENTRAL AND DISTRICT HOSPITALS AND GRADUALLY EXPAND OPTIONAL PAYING SERVICES AND MOVE TOWARDS INTRODUCTION/EXPANSION OF USER FEES AT DISTRICT AND CENTRAL HOSPITALS FOR NON-EHP SERVICES<sup>4</sup> COMBINED WITH APPROPRIATE HEALTH INSURANCE SCHEMES

When user fees were introduced in Malawi's public health system in the 1960s, they resulted in significant public backlash, and several cabinet ministers lost their positions or resigned. Only in the 1990s were user fees again discussed, due to a loan agreement that was signed under the World Bank's Population, Health and Nutrition (PHN) Project. The World Bank argued that user fees would reduce frivolous utilisation, generate revenue, and create a more sustainable health care system. However, just when the project was going to formally commence in 1992, political changes stalled the implementation of the plan. As a new government assumed power after elections in 1994, user fees were abandoned.

The government currently provides free of charge an EHP – a package of services targeting the ailments that most afflict Malawians. Moreover, in practice even those services outside of the EHP are typically delivered for free. Nevertheless, the 2006–2009 NHA showed that an average of 11 percent of total health expenditure came from out-of-pocket payments, 47 percent of which were incurred in public health facilities – either unofficially or in paying wards (MOH 2012a).

Regardless of the political constraints and potential barriers to access, user fees — even if implemented only at central and district hospitals — could generate substantial revenue for the health system. In a health sector where donors finance 86 percent of all health activities, financial sustainability is crucial in order to deliver quality services. Nevertheless, payments for health services could present barriers to access to and utilisation of health care. User fees clearly have both benefits and drawbacks, all of which should be appropriately weighed and assessed.

#### 3.8.1 FINANCIAL MAGNITUDE

Instituting user fees for nearly all services at both central and district hospitals could generate a large amount of income (Figure 9). In the analysis, an average outpatient department fee was developed for both central and district hospitals by taking the current pricing structure for paying wards and assigning weights to certain intervention types based on the estimated patient burden. Once a weighted average was created for paying ward fees, this price was reduced by 50 percent for central hospital outpatients and 75 percent for district hospital outpatients. Inpatient fees were projected to be slightly higher than outpatient fees (MK2,000 and MK1,000 respectively in 2012/13). It should be noted that this preliminary analysis does not propose a fee structure and is simply a way of assessing the potential magnitude of revenues from a fee system; it merely aims to be directionally correct. To more precisely project potential revenues, a detailed analysis should be conducted to assess how fees would impact patient demand and ability to pay.

<sup>&</sup>lt;sup>4</sup> Redefining EHP so that it fits within the resource envelop that can be pre-paid and the rest of the non EHP services be paid through other mechanisms such as household direct out of pocket payments and/or health insurance.

In the analysis it was estimated that close to US\$20 million could be generated at central and district hospitals in 2013/14. If the hospital could retain its collected revenue, this would increase the overall central hospital budget by 65 percent and the district hospital budget by 22 percent. In a period where hospitals are frequently stocking out of commodities and are indebted to the Central Medical Stores Trust because they have inadequate resources, supplementary income could ensure more continuous provision of essential health services.

A 10 percent administrative cost for maintaining user fees was assumed, since additional personnel, training, infrastructure, and reporting systems will be required to run a user fee system.

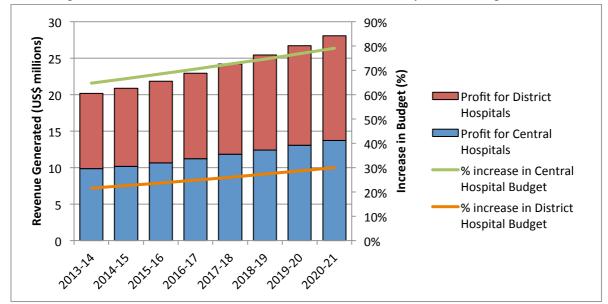


Figure 9. Potential Revenue Generated from User Fees, with Hospitals Retaining Revenues

#### 3.8.2 FEASIBILITY & SUSTAINABILITY

Political feasibility is the greatest challenge to instituting user fees. User fees have had a contentious past, and the public expectation is that health care should be free. Implementation would also present challenges. If fees were instituted, prices would need to be periodically adjusted based on inflation. Appropriate training and audit systems would also be needed to prevent the misuse of finances.

#### 3.8.3 EQUITY & ACCESS

One of the greatest drawbacks of user fees is their potentially negative effect on equity in financing and delivery of health services. It can be argued that fees by themselves dissuade poorer citizens from utilising health services more than wealthier ones, who may already have insurance or are accessing private services and paying wards. This can reduce utilisation of formal health care by poorer demographic groups, encouraging the use of self-medication and informal health sources, postponement of care seeking, and distressed sales of assets, land, and livestock.

Studies on user fees' impact on utilisation have yielded inconclusive and conflicting results. In Zambia, which introduced user fees in the early 1990s, attendance at health centres dropped 35 percent from the beginning of 1993 to the end of 1995. Additionally, it was found that 37 percent of the population resorted to self-medication because they lacked the financing to visit a health centre

(Blas and Limbambala 2001). On the other hand, some studies suggest that combining user fees with improvements in quality can actually increase utilisation amongst the poorest populations (Bodark and Litvack 1993). If user fees were introduced, public sector facilities would find themselves in de facto competition with private sector clinics and hospitals, pushing them to make improvements in quality. In addition, user fees could be accompanied by the introduction of prepayment schemes such as public health insurance, private health insurance, and community health insurance schemes. Nevertheless, to accurately gauge the effect of implementing user fees, a comprehensive assessment would need to be undertaken that is outside the scope of this analysis.

#### 3.8.4 TRANSPARENCY & ACCOUNTABILITY

The institutionalisation of user fees could provide a measure of transparency and accountability. If a well-managed system were implemented, both district and central hospitals would have to improve both financial management and reporting systems in order to retain revenues.

Nevertheless, user fees might also create new opportunities for corruption. In the late 1990s to early 2000s, central hospitals were permitted to retain part of the revenue from paying wards – about 60 percent. However, due to the lack of appropriate reporting and management systems, it became apparent that a portion of revenue was leaking to health workers and other staff. In response, Treasury ended the practice of retaining revenue and now receives revenue directly from central hospitals. Such resource leakage could occur if a user fee system were instituted. Government would have to impose strict regulations and financial controls to minimise leakage including introduction of computerised billing systems or the contracting of banking institutions.

#### 3.9 INCREASE PRIVATE SECTOR INVESTMENTS IN HEALTH

The level of private sector investment in health is quite low. In the latest NHA, MK5 billion was invested in health by employers and entrepreneurs in 2008/09. As this includes the entire private sector of Malawi, the total is strikingly small. Government needs to work with the private sector to ensure that health is a national priority and that investments not only improve the general health of the population but also have tangible economic benefits.

In the following analysis, estimates were made regarding the magnitude of private sector investments in health. Due to high levels of economic uncertainty, conservative growth estimates were made based on the latest NHA (MOH 2012a). It was assumed that on their own volition employers invest 1 percent of their taxable revenue into corporate social responsibility (CSR) projects – 50 percent of which would be allocated to health. This could be an initiative started by government in which they possibly provide tax benefits for CSR investment.

#### 3.9.1 FINANCIAL MAGNITUDE

Based on the latest NHA and growth estimates, it is estimated that US\$15.5 million will be invested in health from employers. These investments include health reimbursements, health insurance, construction and rehabilitation of buildings, purchase of medical equipment, health workers' training, HIV/AIDS workplace programmes, and on-site health services. Figure 10 gives a breakdown of these investments.

Alternative areas of current spending include entrepreneurial investments by individuals or private hospitals or companies for new and existing health care facilities. In 2013/14, it is estimated that only US\$5 million will be spent – 27 percent from loans and 73 percent from existing funds.

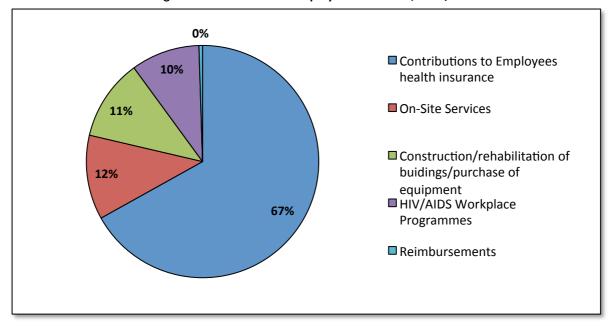


Figure 10. Breakdown of Employer Investment, 2013/14

In Figure 11, it is estimated that employer and entrepreneurial investments continue to rise by a modest amount. As mentioned earlier, it is up to government to increase these investments. Additionally, it is proposed that government attempt to convince companies to earmark 1 percent of their taxable revenue for CSR projects. In this model, 50 percent of the 1 percent CSR contribution goes to health (clearly there are CSR needs outside of health). In this scenario, an estimated US\$22 million could be invested in 2013/14, and gradually increase to over US\$30 million in 2020/21. It should also be noted that conservative growth estimates are used due to the current economic situation. If the economy improves and government is able to establish partnerships with private sector, investments could increase further.

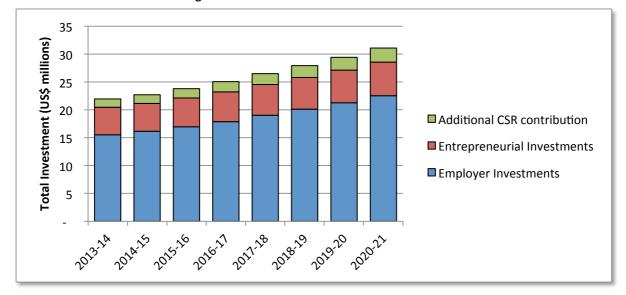


Figure 11. Private Sector Investment in Health

# 3.9.2 FEASIBILITY & SUSTAINABILITY

Increasing private sector investment could be difficult, considering Malawi's current poor levels of economic growth and high inflation. In 2009, real GDP grew at around 8.9 percent. This has since shrunk to 4.3 percent in 2011 and 1.9 percent in 2012. It is estimated that growth will resume, but at a slow pace. Additionally, banks have raised interest rates to over 40 percent per annum making it difficult for entrepreneurs to borrow money and invest in health. This is combined with lower purchasing power from consumers.

Whilst many private sector companies may be willing to contribute additional funds for health, the current poor economic reality makes investment difficult. Nonetheless, government should strive to work with private sector to make health a priority and to partner where possible so that additional funding can be realised.

# 3.9.3 EQUITY & ACCESS

Increases in private sector investment in health can both promote and discourage access and equity. In regards to on-site service provision, quality health care can be provided regardless of socioeconomic status. Additionally, increased health CSR contributions can have an effect not only on those who work with the company, but within the community as well. For example, health initiatives undertaken in the community can have a positive effect on health outcomes and access to and utilisation of health care services.

However, contribution to health insurance, reimbursements, and the expansion of private facilities can promote inequities in access. Typically only insurance members and their beneficiaries can access and afford private health care facilities, whilst those without insurance are left to attend a public hospital where care is free.

#### 3.9.4 TRANSPARENCY & ACCOUNTABILITY

Mutual mistrust exists between government and companies, and as a result many private entities are resistant to partnering with government. This relationship will need to be remedied if increased investment in the public health system is to take place.

# 3.10 INTRODUCE EARMARKED FUNDS FOR HEALTH FROM INTERNATIONAL AND DOMESTIC LOTTERIES

Lotteries can generate significant revenue to finance public health. Developed countries like Belgium and the UK finance a portion of their foreign development aid through national lotteries (UNDP 2012). Developing countries can also use lotteries to generate revenue for development, though the market opportunities are smaller and the business risks greater. Countries such as Mexico and Nigeria have successfully used lottery revenues to generate additional revenue for government. A Malawian lottery that earmarks revenues for health might generate substantial funds to finance the public health system.

Whilst promising in theory, lotteries have not fared well in Malawi. Lotto 5 operated only several months before closing, and the Malawi National Lottery existed just one year before closing in August 2012 (Nyasa Times 2012). Whilst Malawi National Lottery was a government parastatal with a mandate to generate revenues for Treasury, it failed to generate a profit and in fact accumulated significant debts. It remains uncertain whether the Malawian economy is currently large enough to sustain a lottery, which relies on having a sufficiently broad customer base to sustain the payout of prizes.

#### 3.10.1 FINANCIAL MAGNITUDE

The 2003 Lotteries Act stipulates that all companies granted a license to run a lottery must contribute 10 percent of profits to the Malawi Revenue Authority. The investment plan of the Malawi National Lottery provides an idea of how much revenue this might potentially generate. The failed lottery estimated that it could generate US\$14–17 million in 2012 and then as much as US\$28 million by 2014. If 10 percent of such revenues were earmarked for health, nearly US\$3 million in annual revenues could be generated. This amount would provide only an incremental increase to the MOH budget, which in 2011/12 was US\$132 million. The failure of the Malawi National Lottery also raises questions of whether such revenue projections are realistic under any circumstances.

#### 3.10.2 FEASIBILITY & SUSTAINABILITY

The success of lottery companies in other African countries demonstrates that the business model can be viable. Most countries establish lottery companies as parastatals, in which a portion of revenues are automatically allocated to Treasury or another public fund. If the customer base is large enough, lotteries can be self-sufficient businesses that generate a steady stream of profits. However, the recent failure of two companies in Malawi suggests that the market is not yet large enough to sustain a national lottery. As with other revenue-generation mechanisms, the MOH would also have to make a compelling case to earmark revenues for health rather than general government revenues.

### 3.10.3 EQUITY & ACCESS

Lotteries have sometimes been considered a regressive tax, since studies have shown that low-income individuals tend to gamble more than higher-income individuals (Schabbel 2007). However, data supporting this hypothesis come mainly from developed countries. The socio-economic distribution of lottery customers in developing countries remains less well documented.

# 3.10.4 TRANSPARENCY & ACCOUNTABILITY

As a public company a lottery would be subject to national accounting standards for disclosure of financials. Moreover, under the Lotteries Act any company would also be regulated by the National Lotteries Board. However, risks do exist, since revenues would be collected by the company rather than government, and the managers would always have incentive to channel revenues towards their own profits rather than proceeds for the Malawi Revenue Authority. Such diversion of funds could be accomplished through a variety of accounting manoeuvres, both legitimate and illegitimate.

# 3.11 STRENGTHEN RESOURCE GENERATION MECHANISMS AT CENTRAL AND LOCAL LEVEL

Increased public revenue collection may also generate additional funds for health. The MOH receives funding from Treasury, and increases in public revenue will almost certainly lead to increased funding for the ministry. Even if the proportion of government funding allocated to the ministry remains constant, a continuing increase in the size of the government budget will generate additional revenue for health.

Government can seek to increase revenue in two ways. First, policies that successfully promote economic growth can lead to increased revenue collection, as the national economy expands. A second possibility is to increase current levels of taxation, either through higher rates or expanding tax collection. This second option must be exercised with caution, as higher taxes can potentially stifle economic growth. In recent years, public revenues have ranged from 18 to 24 percent of GDP – the highest rate in the SADC region. The Ministry of Finance is averse to further tax increases, which might place an undue burden on the economy.

That said, opportunities do exist to make marginal increases in tax revenue. Government can explore options for closing tax loopholes and exemptions, in order to ensure that all individuals and businesses pay for the public services they receive. It is also possible to expand tax revenue from the informal sector, particularly through improved collection of the 16.5 percent VAT. Nevertheless, collecting taxes from the informal sector requires intensive resources, and the great cost of informal sector tax collection may outweigh the benefits.

# **3.11.1 FINANCIAL MAGNITUDE**

Because substantial tax increases might hinder economic growth, opportunities to generate additional revenue from expanded tax collection are limited. Moreover, collecting taxes from the informal sector is challenging and operationally expensive.

#### 3.11.2 FEASIBILITY & SUSTAINABILITY

Though higher taxes might immediately generate additional revenue for government, they might stifle economic growth, thereby leading to lower revenues in the long run. Nevertheless, once tax collection systems are established, they can be sustained with relatively little incremental cost.

#### 3.11.3 EQUITY & ACCESS

New tax measures should be assessed to account for their impact on equity. Certain taxes on VAT and telecoms may be regressive, disproportionately affecting the poor.

#### 3.11.4 TRANSPARENCY & ACCOUNTABILITY

As the national custodian of tax revenue collection, the Malawi Revenue Authority is subject to regular audits. Its operations are closely monitored by the Ministry of Finance.

# 3.12 INCREASE ABSOLUTE FUNDING OF DONOR HEALTH SECTOR INVESTMENTS

Donors currently provide 86 percent of funding in the Malawi health sector (Figure 12). Whilst reducing such donor dependence is an important long-term priority, it is second to ensuring that essential, life-saving programmes remain funded. Though donors already provide large amounts of health funding, additional grants would be welcomed to finance currently underfunded areas such as diagnostics, infrastructure, and essential medicines.

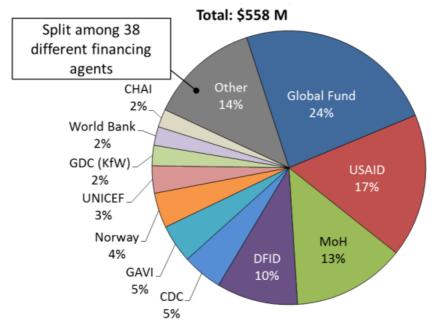


Figure 12. Sources of Planned Spending 2012/13

Source: Ministry of Health 2011a. Round 1 Resource Mapping

Convincing donors to commit more funds to the Malawi health sector requires a strong case for investment. A gap analysis of HSSP needs versus available resources can be particularly helpful in this regard, highlighting areas of need. An initial gap analysis revealed shortages of funding for essential medicines and EHP infrastructure, but a re-costing of the HSSP may be needed to determine the full extent of health sector needs. The current HSSP costing appears to underestimate need in several key areas.

Another prerequisite for additional investment is accountability. Donors will only invest funds if their appropriate expenditure is ensured, and strong measures for safeguarding funds are essential. Whilst the MOH audits its spending and procurement plans regularly to satisfy donor requirements, questions frequently arise regarding audit arrangements. If the government could more thoroughly satisfy donors' audit requirements, it is possible they would be willing to contribute more funds.

# **3.12.1 FINANCIAL MAGNITUDE**

Malawi could request additional resources from several large donors. The Global Fund already provides US\$133 million this fiscal year through its HIV, TB, and Malaria grants, but under the New Funding Model being introduced Malawi could potentially request funding to cover its rising costs of providing antiretroviral therapy (ART) in the years ahead. In particular, additional financing will be needed to buy more expensive ARVs as treatment continues to be scaled up. Another potential source of additional funding is the US government. Unlike neighbouring Zambia and Mozambique, Malawi is not a PEPFAR focus country – despite its low-income status and high HIV burden. If Malawi were classified as a focus country in the future, it would immediately access a larger pool of funding.

# 3.12.2 FEASIBILITY & SUSTAINABILITY

As noted above, Malawi already relies heavily on donor funding for health. Though receiving additional funding to save lives might take priority over long-term sustainability concerns, the government must carefully plan for how it can assume financial responsibility over time. It would be imprudent for donors to provide additional funding in the absence of plans for increasing government contributions over time. Donors such as the Global Fund and GAVI Alliance already require counterpart financing commitments, and other donors might consider such arrangements as well.

# 3.12.3 EQUITY & ACCESS

The impact of donor funding on equity and access depends on how it is spent. If donor funds are allocated to priority areas, they have the potential to significantly increase access – particularly to life-saving medicines. However, donor funding that is spent at the central level rather than reaching people on the ground may in fact contribute negatively to access, providing a false impression that funds are available for health services when in fact they are spent on administrative costs.

# 3.12.4 TRANSPARENCY & ACCOUNTABILITY

Increasing donor funding can improve accountability, if managed effectively. Donors often have strict monitoring and evaluation (M&E) reporting requirements, which encourage government to track inputs and results across programmes. In addition, donor auditing requirements can lessen the risk of financial malfeasance. Nevertheless, overly burdensome reporting and auditing requirements can became a problem when they divert ministry staff from their normal work.

# 3.13 LOBBY WITH MINISTRY OF FINANCE TO MEET ABUJA TARGET OF 15 PERCENT ALLOCATION TO THE HEALTH SECTOR AS A SHARE OF TOTAL GOVERNMENT EXPENDITURE

As stated in the HSSP 2011–16, the Government of Malawi seeks to achieve the Abuja Declaration (2001) target of spending 15 percent of the government budget on health. However, due to

increased donor volatility and a lack of general internal resources, this target has consistently not been met. In 2007/08, the MOH hit this target with an allocation of 15 percent; however, in 2012/13, that percentage fell to 8.9 percent (Table 6).

**Table 6. Government Budget for Health** 

Fiscal Year	Total Govt. Budget (MK billion)	MOH Budget Allocation (MK billion)	Percent Allocation
2005/06	117.4	14.2	12.10%
2006/07	135.9	17.3	12.70%
2007/08	162.9	25.1	15.40%
2008/09	229.2	31.1	13.50%
2009/10	244	32.9	13.50%
2010/11	285.8	36.4	12.70%
2011/12	300	30.9	10.30%
2012/13	307.71	27.6	8.97%
*2013/14	355.09	39.06	11.00%
*2014/15	409.78	49.17	12.00%
*2015/16	472.88	61.47	13.00%
*2016/17	545.71	81.85	15.00%

Source: MOH 2011b

# 3.13.1 FINANCIAL MAGNITUDE

Assuming that the government increases the MOH budget allocation by 1 percent yearly from 2013/14 and meets Abuja target in 2016/17 and that government revenue grows at 15.3 percent year, resources going to the MOH would dramatically increase by 100 percent to MK81 billion.

#### 3.13.2 FEASIBILITY & SUSTAINABILITY

The MOH could achieve the Abuja target by:

- Organizing high-level meetings with the Ministry of Finance to ensure that the ministry formally recognise the HSSP and key international commitments in health care financing i.e. the Abuja target of allocating at least 15 percent of the government budget to health.
- Conducting annual modeling of expected resource needs versus expected resource availability via gap analyses, generating evidence with which to lobby Treasury for added funding.
- Developing tools and models that show the causal link between health investments and macroeconomic performance, allowing the MOH to present a strong business case for increased resource allocation.

# 3.13.3 EQUITY & ACCESS

Increasing the health budget by 100 percent as in the case of model above could significantly increase the quality of services in public health facilities.

#### 3.13.4 TRANSPARENCY & ACCOUNTABILITY

Strong financial controls would be needed to ensure appropriate use of increased funding for the public health system.

<sup>\*</sup> Hypothetical budget provision for 2013/14 that would meet the Abuja Target

# 4. OBJECTIVE 2: IMPROVE EFFICIENCY IN HOW FINANCIAL RESOURCES ARE ALLOCATED, MANAGED, AND LIQUIDATED

# 4.1 STRENGTHEN RESOURCE ALLOCATION PROCESSES TO INCREASE ALIGNMENT BETWEEN ACTUAL RESOURCE ALLOCATIONS, HEALTH NEEDS, AND HSSP PRIORITIES

Although the HSSP provides the guiding strategy for the Malawi health sector, in practice it plays little role in financial allocation decisions. This is partly due to its lack of prioritisation. The HSSP states that all components of the EHP should be funded, but it does not say which areas are of highest priority. Facing hard decisions about where to place limited resources, government and donors have no clear guidance about which programmes to fund. Financing decisions are made in a one-off basis, without a comprehensive guiding strategy.

Another challenge is that the largest providers of health funding often make decisions in isolation. When the MOH develops its annual budget, relatively few consultations take place with the National AIDS Commission, PEPFAR, and other important programmers of health funding. Conversely, these actors often make their plans without extensively consulting government.

#### 4.1.1 FINANCIAL MAGNITUDE

Although aligning resource allocation to HSSP priority areas would not increase the total available amount of funding, allocating resources to high-priority areas would increase the total amount of funding for those crucial programmes.

# 4.1.2 FEASIBILITY & SUSTAINABILITY

Uncoordinated donor investments present a problem for sustainability, as donors may invest in programmes not prioritised by government or that are not financially viable without external support. Ensuring alignment to the HSSP would help avoid such scenarios, as all donors would programme grants with a practical understanding of how to move towards full government ownership.

# 4.1.3 EQUITY & ACCESS

Using resources more efficiently could increase access, as funds would be directed to the areas of greatest need on the ground. Although US\$558 million is already available in 2012/13, critical shortages of drugs and other essential commodities frequently occur. Using resources to meet these needs would be of tremendous benefit to individuals in need.

# 4.1.4 TRANSPARENCY AND ACCOUNTABILITY

Better alignment of resources to the HSSP would indirectly strengthen transparency and accountability. Government and donors working together to achieve such alignment would automatically create greater visibility into funding patterns across the health sector. At present, health sector actors often work in silos, unaware of what others are doing. Working together to invest funds in a strategically coordinated fashion would help reduce this problem.

# 4.2 MAXIMISE DISTRIBUTION AND IMPACT OF HEALTH WORKERS TO IMPROVE EFFICIENCY OF SERVICE DELIVERY AT ALL LEVELS OF CARE

Malawi continues to suffer from an acute shortage of health workers in the public system. A 2010 optimisation analysis of human resources for health found that the government would need to increase its health workforce of medical officers, clinical officers, nursing officers, nurse midwife technicians, medical assistants, and health surveillance assistants by a total of 19,033 staff to meet the existing demand for health services from the population. Interestingly, the majority of this health worker shortfall could be addressed by filling posts on the government human resource rolls for which funding is already available from Treasury. As of 2010, only 51 percent of such funded posts were filled (MOH 2011c).

Nevertheless, this finding also suggests that additional investments in pre-service training are needed to alleviate the shortfall and produce more qualified graduates to fill vacant posts. Increasing the number of first-year students enrolling in BSCN, DN, and NMT (Nursing and Midwifery Technician) training programmes to 400, 100, and 1,230 respectively will result in a 194 percent increase the available nursing workforce by 2021. Supplemental interventions targeting graduation rates and public sector entry rates can also help close the gap over the next decade. Severe staffing shortages were also observed amongst clinical officers and medical assistants, suggesting a strategic increase in health training institution enrolment is needed to meet the minimum need for health workers in Malawi.

#### 4.2.1 FINANCIAL MAGNITUDE

Funding for pre-service training represents only a small proportion of total health sector funding at present. Available information suggests that investments in pre-service training constitute less than 1 percent of total health sector financing for 2012/13 (MOH 2012b). Relatively small, incremental increases in funding for pre-service training could go a long way towards alleviating Malawi's health worker shortage and whilst not substantially affecting total available health sector resources.

# 4.2.2 FEASIBILITY & SUSTAINABILITY

Sustainability poses a relatively less significant concern in the case of pre-service training, which is often considered an investment rather than a recurrent cost. Today's short-term allocations to training institutions can produce dividends for years to come in the form of health workers who treat patients in the public sector for 20–30 years.

Increased capital investment in pre-service training was also is needed. Malawi has two medical schools and 10 nursing colleges that with added infrastructure – building new classrooms and dormitories and furnishing teaching facilities with necessary equipment – could train additional students each year.

# 4.2.3 EQUITY & ACCESS

As of 2010, rural health centres were staffed at just 9 percent of the optimal level to deliver effective care (MOH 2011c). Given that the majority of Malawians live in rural areas, such a severe shortage of staff represents an important barrier to accessing quality care. A shortage of qualified clinicians results in increased wait times for patients and reduced quality of care. Improving the availability of

qualified health workers could greatly improve equity and access to health care services, especially in rural areas.

#### 4.2.4 TRANSPARENCY & ACCOUNTABILITY

Information about public funding for the health workforce and pre-service training is available on the public record as part of the annual government budget. As such, it can be accessed by all interested parties. Nevertheless, the specific details about how funds are allocated can be difficult for many observers to obtain and understand, which poses challenges in terms of accountability.

# 4.3 IMPROVE DISBURSEMENT PROCESSES FROM THE MINISTRY OF FINANCE TO DISTRICTS

Districts are supposed to receive predictable monthly disbursements from Treasury in order to effectively finance health service provision. However, disbursements are sometimes delayed and the dispersed amounts are unpredictable. This greatly hinders the districts' ability to plan and allocate resources. Irregular disbursement can result in overspending and under spending, and adversely affect activities such as drug procurement, which require a long lead time.

Table 7 shows the irregularity of disbursements in Dowa district.

Table 7. Health Disbursement for Dowa District, July 2012-March 2013

Month	Date Funding Received	Days Since Last Disbursement	Amount (MK)
July	08-Jul-12	-	28,880,392
August	22-Aug-12	45	34,329,195
September	17-Sep-12	26	33,252,050
October	31-Oct-12	35	34,624,798
November	14-Nov-12	14	33,136,523
December	18-Dec-12	34	34,052,050
January	15-Jan-13	28	28,052,050
February	11-Feb-13	27	28,136,523
March	19-Mar-13	36	29,136,523

# 4.3.1 FINANCIAL MAGNITUDE

The opportunity costs of funding delay to districts are manifest in planning, procurement, and delivery of services. This includes procurement of drug commodities and timely provision of essential health services. Total funding that goes to the district hospitals and health zones is approximately MK16 billion per year.

# 4.3.2 FEASIBILITY & SUSTAINABILITY

The existing system is such that funds are channelled from Treasury directly to district accounts through commercial banks. However, Treasury depends on receipt of revenue from the revenue collecting bodies and frequently it does not have funds available to make timely payments to

districts. Another challenge leading to late disbursements is the inability of districts to fully account for spent/unspent funds, which is a requirement before they can be given more funds.

The proposal for timely disbursement to health cost centres could be feasible if Treasury can prioritise funding to health facilities as it does with Police and Prison services.

To improve certain funding, the Ministry of Finance has engaged Airtel Malawi to use its Airtel Money Service to make timely funding transfers of salaries and other benefits to civil servants and it may adopt use of the service to transfer large amounts of funds such as those going to district hospitals and facilities.

# 4.3.3 EQUITY & ACCESS

Timely funding could improve overall access to care and prevent challenges like drug stock-outs, leading to improved provision of care, especially in areas of high need.

# 4.3.4 TRANSPARENCY & ACCOUNTABILITY

Improving disbursement processes to the district will make funding available for provision of health services on time. The districts will conduct their activities on time and they will have ample time to effectively produce expenditure reports, as opposed to the current scenario where funding delays also delay the district reporting schedule.

# 4.4 IMPROVE EFFICIENCY OF THE PROCUREMENT AND SUPPLY CHAIN SYSTEM

Malawi currently maintains multiple parallel supply chains that deliver health products to MOH facilities. Concerns regarding the accountability and efficacy of the Central Medical Stores Trust (CMST) led to the establishment of a parallel supply chain for ARVs in 2004 and the other two for malaria and family planning commodities in 2010. At present, three major parallel supply chains exist alongside CMST: the SDV supply chain for Global Fund HIV and TB commodities, the JSI/UNICEF supply chain that manages commodities for malaria, family planning, and essential medicines, and finally, the PSI supply chain that manages distribution of mosquito bed nets to health facilities. Figure 13 illustrates these supply chains.

Maintaining multiple supply chains inevitably leads to increased spending, as each supply chain must establish parallel systems for procurement, storage, and distribution. Government has made it a priority to reintegrate these parallel supply chains into the national system, reincorporating CMS as a semi-private trust outside the jurisdiction of the MOH in 2012. Although concerns remain about the absorptive capacity of CMST, integration of supply chain management functions would generate efficiencies of scale that would potentially free up management funding for actual procurement of medicines and other health products.

However, an estimate of possible savings can be made through analysis of current costs. Evidence indicates that supply chain management costs vary substantially across the parallel supply chains (Figure 14). On the SDV supply chain Procurement and Supply Management (PSM) costs represent 17 percent of the value of the commodities managed, whilst this same proportion is 36 percent for the JSI/UNICEF supply chain and 26 percent for the PSI supply chain. Meanwhile, CMST intends to keep its PSM costs to no more than 12.5 percent of the value of the commodities it manages. It

remains to be seen whether or not CMST is able to ensure the consistent availability of commodities with this lean cost structure, but if possible, substantial cost savings would be generated.

Ordering & Value of **Financing** Storage Distribution agents Shipping commodities **CMST** МоН UNFPA UNFPA Essential med's, FP **CMST CMST** Stop TB commodities, TB МоН (GDF) drugs, malaria drugs Global Fund **SDV** Global Fund All Global Fund HIV CHAI-UNICEF SDV SDV UNITAID and TB commodities CHAI Malaria, family planning МоН JSI/UNICEF **USAID** Global Fund CML\* Malaria drugs, tests Global Fund (JSI oversight) JSI CML & other commodities, DFID Essential med's (JSI oversight) essential med's, FP Norway RTT commodities UNICEF GDC (KfW) (JSI oversight)

Figure 13. Illustration of Malawi's Four Largest Parallel Supply Chains, 2012/13

Source: MoH 2012c

**USAID** 

PSI – nets\*\*
PSI also manages FP

commodities, malaria drugs for

village clinics\*\*\*



\* The \$4 M mass community distribution of nets funded this year by Global Fund is managed by Mulli Brothers

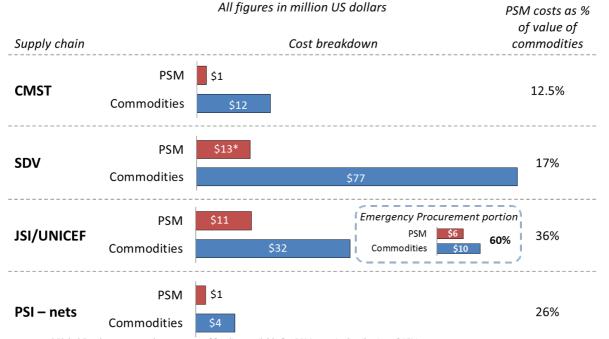
PSI

PSI

JSI

\*\*\* Detailed information on the PSI supply chain for FP commodities was not available

\* Storage of malaria commodities will soon be transitioned to RTT



<sup>\*</sup>Global Fund may soon reduce amount of funding available for PSM costs in distribution of ARVs Note: questions regarding absorption capacity are not taken into account

Source: MoH resource mapping data, PSI, and Global Fund budgets for SSF HIV grant, Round 7 Malaria grant, Round 9 Malaria grant

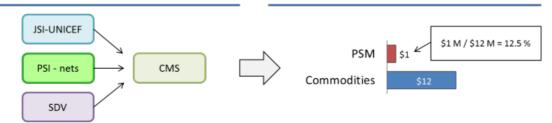
Source: MoH 2012c

If the three major parallel supply chains were collapsed into a CMST running at this 12.5 percent rate, and if the value of the commodities remained the same, US\$11.2 million in annual savings would be generated (Figure 15). Even if CMS operates at the slightly higher PSM rate of 15 percent, US\$8.5 million of annual savings would be created. Although such savings would accrue to donors rather than the government directly, this is funding that could be used to procure more health products.

Figure 15. Depiction of Collapsing the Three Major Parallel Supply Chains into a CMST

CMST plans to integrate the largest parallel supply chains into its own system

At present, CMST plans for PSM costs to be no higher than 12.5% of the value of commodities



Integrating the parallel supply chains into CMS could potentially save \$11.2 M per year

	Commodity costs	PSM costs	PSM costs as % of comm'dities	Savings from reducing PSM costs to 15%	Savings from reducing PSM costs to 12.5%
SDV	\$77.2 M	\$12.9 M	17%	\$1.3 M	\$3.2 M
JSI-UNICEF	\$31.7 M	\$11.4 M	36%	\$6.7 M	\$7.4 M
PSI – nets	\$4.3 M	\$1.1 M	26%	\$0.5 M	\$0.6 M
TOTAL	\$113.2 M	\$25.4 M	22%	\$8.5 M	\$11.2 M

Note: absorption capacity issues may impact potential cost savings but are difficult to quantify and were not included above
Source: MoH resource mapping data and Global Fund budgets for SSF HIV grant, Round 7 Malaria grant, Round 9 Malaria grant

Source: MoH 2012c

# 4.4.1 FINANCIAL MAGNITUDE

Collapsing parallel supply chains into the CMST has the potential to create economies of scale, as only one system would be needed for procurement, storage, and distribution. Such savings may be substantial, especially for distribution costs, which typically comprise the bulk of supply chain costs. Maintaining a single distribution system would reduce the number of trucks, personnel, and petrol needed each month for transport of health products to health facilities.

Nevertheless, a detailed assessment of potential savings from supply chain integration has not taken place to date. Without a thorough analysis of current costs and management practices on each supply chain, it is impossible to judge the exactly amount of savings that could be generated through integration.

# 4.4.2 FEASIBILITY & SUSTAINABILITY

Although the country's parallel supply chains have been effective in delivering supplies to patients, they depend entirely on donor funding. Whilst the donors that support these supply chains are unlikely to withdraw support in the near term, a future shift in donor priorities could significantly disrupt the working of the current supply chains.

A re-integrated CMST would still depend on significant donor support for the procurement of HIV, TB, and malaria commodities but actual CMST financing would come from domestic sources. According to the current CMST business plan, some funding for CMST would come from government and the remainder would come from revenues from the sale of commodities to district councils and private sector providers. Although domestic economic shocks could periodically threaten these funding streams, they are likely to be relatively sustainable over time.

# 4.4.3 EQUITY & ACCESS

The ability of CMST to effectively manage distribution of many different commodities remains unknown. Concerns have been raised regarding how supply chain re-integration might impact the availability of health products at facilities, as CMST may initially struggle to provide the same standard of service delivered on the parallel supply chains. Disruptions in the distribution of medicines and other health products could jeopardise patients' access to diagnosis and treatment for HIV/AIDS, TB, and malaria. Recent advances in treatment coverage could be put at risk, potentially reversing hard-won gains and threatening equity and access.

# 4.4.4 TRANSPARENCY & ACCOUNTABILITY

Commodities managed by CMST are closely monitored by the donors that supply them. Should issues of accountability or mismanagement emerge, these donors are likely to intervene.

Additionally, sharing of information across the parallel supply chains remains a challenge. Operations of the three parallel supply chains are not always coordinated, and separate information systems exist to track supply on each supply chain. Increased coordination and integration of parallel supply chains could enhance monitoring systems for transparency and accountability.

# 4.5 INTRODUCE PERFORMANCE-BASED FINANCING

Performance-based financing (PBF) 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 and Levine 2009). Currently, there are two PBF schemes under development that will be implemented as pilot projects in Malawi. The two three-year projects are being financed by KfW/Norway and USAID with technical support from Options and SSDI respectively. The KfW/Norway-funded MOH/Options pilot aims to improve the performance and quality of maternal and neonatal health in Malawi. On the supply side, it will seek to improve health performance and quality through the use of financial incentives and rewards to health workers. On the demand side, the scheme will aim to promote changes in health seeking behaviour by compensating expectant mothers for the out-of-pocket costs of seeking and utilising designated neonatal health facilities. The project will be piloted in Mchinji, Dedza, Ntheu, and Balaka districts.

The USAID-funded MOH/SSDI Performance-Based Incentive pilot will be on the supply side only — motivating health workers through incentives to improve their performance in terms of quantity and quality of selected EHP services (maternal and neonatal, family planning, child health, HIV/AIDS, TB and malaria) delivered in Chitipa, Nkhotakota, and Mangochi districts.

At the moment, there is no indication that government would financially support either of the two initiatives – meaning they are entirely donor financed.

#### 4.5.1 FINANCIAL MAGNITUDE

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 by developing a better performing health system, donors and Treasury will be more open to investing in a functional health care system.

In fact, PBF can be quite costly. It requires additional manpower, training, and infrastructure. Currently, both pilots are examining the true costs of PBF in Malawi and its effectiveness in improving access and equity in health. Experience from other countries, such as the Democratic Republic of the Congo, illustrate that PBF national roll-out can require up to 30 percent of national health expenditure. In Burundi, RBF requires 20 percent of Burundi's total health budget (Moore and Conteh 2010). If this is true, the financial sustainability of a PBF option is limited, as such an option will require substantial donor support.

# 4.5.2 FEASIBILITY & SUSTAINABILITY

The HSSP 2011–16 endorsed PBF as one of the strategies to be explored in financing health in Malawi. This official endorsement coupled with the commencement of two PBF projects illustrates that there is sufficient political will. Additionally, whilst certain infrastructure and systems are required before PBF begins, infrastructure needs are relatively minimal and within reach according to initial PBF assessments. In fact, some of the infrastructure needs will be addressed using PBF bonuses once implementation has commenced.

However, the sustainability of PBF is challenging. As discussed previously, PBF is expensive, and the government has shown no commitment to provide necessary funding. If PBF is to be entirely donor funded, its sustainability will be tenuous.

#### 4.5.3 EQUITY & ACCESS

Current research on whether or not PBF has positive effects on equity and access is mixed. In many cases, service quality improves, higher health outcomes are achieved, and utilisation increases. For example, in a review financed by USAID, numerous positive effects were found when PBF was used for maternal services. In several instances, PBF motivated health workers, increased coverage for maternal services, and increased the number of deliveries attended by skilled birth attendants (USAID Traction Project 2011).

PBF is also associated with negative outcomes including neglecting services that are not covered under PBF, undermining intrinsic motivations for health workers, encouraging unnecessary services, and engaging in excess provision. Each of these potential outcomes can have negative consequences on equity and access. This makes it crucial for any PBF scheme to be carefully designed so that adverse effects can be mitigated.

# 4.5.4 TRANSPARENCY & ACCOUNTABILITY

Engaging in PBF may provide enhanced transparency and accountability. As numerous reporting structures are required, government typically has increased oversight in how facilities are

performing. This oversight is necessary in order to provide incentives accordingly. Additionally, it could be said that linking payment to outputs/results/performance, and not inputs, will increase the confidence of donors and government in how health facilities are operating.

That being said, there is evidence from Rwanda of corruption and gaming. In developing any PBF scheme, stringent reporting and management systems need to be institutionalised to mitigate this risk. In the current example of the two RBF pilot projects, monitoring tools have been designed to quickly detect any negative effects and provide remedial solutions.

# 4.6 STRENGTHEN PAYMENT/MANAGEMENT SYSTEM AT PAYING WARDS TO OPTIMISE EFFICIENCY AND PROFITABILITY

As explained above, public facilities provide EHP health services for free at the point of use and they frequently also provide interventions outside of the EHP for free. Nonetheless, for years, central hospitals have provided an option for patients to attend a paying ward within the same facility. In paying wards, patients have the same level of access to doctors and drugs as non-paying patients but receive improved non-medical services associated with beds, space, and meals.

Within this system, numerous challenges exist: 1) Interventions are not well costed and priced, meaning that paying wards do not adequately set prices to ensure cost recovery; 2) the system is at risk of promoting inequitable and preferential treatment of paying patients over non-paying patients; 3) poor revenue management, accounting systems, and accountability lead to resource leakages; 4) human resource constraints make it difficult to spread time across wards; and 5) hospitals are not permitted to keep revenue from paying wards as it is directly sent to Treasury.

Regardless, there are large opportunities for strengthening the paying ward system, both in terms of revenue generation and improved efficiency. If interventions were well costed and priced with full cost recovery in mind, and if hospitals were permitted to retain revenue, resources could be used to improve the quality of health service delivery in non-paying wards. Additionally, by improving efficiency and by embracing some elements of private sector culture (such as emphasis on good customer care), overall hospital care could be improved. By creating a pleasant customer experience and attempting to increase demand, profitability could increase and additional resources could be generated for the hospital.

# 4.6.1 FINANCIAL MAGNITUDE

Paying ward prices have been developed using a band system. Currently, there are nine bands, and in each band are a range of interventions – band 1 includes the simplest procedures and band 9 includes the most difficult and costly. As the band number goes up, the procedure is more costly for the patient.

Band prices have been revised three times in the last decade: in 2004, in 2006 (by 60 percent), and in 2011/12. The latest revision set prices by taking 40 percent of the current average private sector price in an effort to maintain competitiveness. Patients are then charged varying prices on whether or not they are uninsured/have insurance, have been sent by their company, or are foreign. Despite the latest pricing, the MOH is concerned that interventions are still not well-costed and that paying wards are operating at a lost. Unfortunately, patient data do not exist for each band, and as the true

cost of each intervention is unknown, it is difficult to estimate the increase in revenue if costing were revised.

Regardless, it is known that hospitals are operating at a loss, and a costing needs to be conducted. If interventions are accurately costed and prices are set with full cost-recovery in mind, hospitals could cover the costs of paying wards with the possibility of subsidizing non-paying wards. This would ease strained central hospital budgets and enable them to improve health services.

The costs of implementing such a system would be primarily associated with hiring additional staff, training workers in financial management and bookkeeping, and improving IT systems. Such costs would likely not be extensive given the current systems already in place and the potential benefits of efficient paying wards operating at full cost recovery. Regardless, an assessment of the required systems should be conducted in order to have an accurate picture of the costs associated with strengthening central hospital paying wards.

# 4.6.2 FEASIBILITY & SUSTAINABILITY

The feasibility of strengthening paying wards, re-costing services, and retaining revenue faces two primary hurdles: 1) The possibility of public pushback if the re-costing illustrates a need to increase prices and 2) Treasury pushback in regards to hospitals retaining paying ward revenue instead of sending it directly to Treasury.

In order to minimise public outcry, services at paying wards will need to be improved so that they are at least comparable to the level of service provided at private clinics. Otherwise, patients will increasingly seek care at private clinics and paying wards will operate at an even greater loss. If paying ward patients see acceptable value for money, and if there is political will to push such a policy through, pushback could quickly dissipate.

In order to convince Treasury that retaining revenue is a possible, central hospitals will need to demonstrate that they have appropriate financial controls and management systems in place to accurately track transactions, manage resources, and prevent any kind of skimming or corruption. Central hospitals were permitted to retain revenue up to the early 2000s, but this practice was abruptly ended due to allegations of corruption. Additionally, hospitals will need to provide the business case that revenue will be used responsibly and that certain health outcomes will be achieved if retention is permitted.

# 4.6.3 EQUITY & ACCESS

One of the key arguments against paying wards is that it could promote inequitable and preferential treatment of paying patients over non-paying patients. It is hypothesised that doctors and nurses spend greater time in paying wards because 1) paying patients require greater attention and 2) if medical personnel spend greater periods of time in paying wards and the quality of care is noticeably higher, non-paying ward patients will consider paying for service.

However, it has been shown in several cases that bias towards paying wards is not a factor, and that medical personnel tend to split their time according to patient demand. In fact, many conclude that paying wards, which accurately price interventions and run efficiently, can be used for the general

benefit of the hospital by purchasing new equipment, refurbishing facilities, retaining highly qualified medical personnel, and improving overall medical services.

# 4.6.4 TRANSPARENCY & ACCOUNTABILITY

As stated earlier, central hospital paying wards faced problems of skimming and corruption up to the early 2000s due to poor financial controls and reporting. As such, Treasury revoked their ability to retain revenue, instead having central hospitals send all revenue directly to Treasury. If payment systems are strengthened, staff is trained, and controls are put into place, central hospitals will be more transparent and accountable regarding the type of services they provide and whether or not facilities are being run cost-effectively. Such improvements could alter Treasury's decision and permit central hospitals to retain revenue.

Additionally, transparency and accountability could not only increase in paying wards, but in non-paying sections of hospitals as well. Since staff share duties and wards do not operate in complete isolation, there will undoubtedly be positive spill-over effects into non-paying wards as staff will be better trained and systems/processes across the hospital will be improved.

# 4.7 PILOT ESTABLISHMENT OF SOME HEALTH FACILITIES AS COST CENTRES

Studies done in Malawi, including one by Mills et al. (1991) and another by Mwambaghi et al. (1995), have shown that spending by the district health office (DHO), which is the cost centre for district health services, is skewed in favour of the district hospital. The two studies estimated that only around 30 percent of recurrent DHO expenditures go to peripheral facilities (health centres, dispensaries, rural hospitals including prevention and public health activities). One reason for this is that health centres and rural hospitals do not manage funds and thus do not know their budgets; they simply request drugs and other needed supplies from the DHO, and then depend on the DHO for delivery, which is often long delayed. This results in frequent stock-outs of drug and other basic medical supplies at the facilities, disrupting efficient provision of health services.

# 4.7.1 FINANCIAL MAGNITUDE

There are no immediate and clearly quantifiable financial gains that could be realised by making health centres and rural hospitals autonomous. However, it is envisaged that the e more efficient resource allocation and utilisation, resulting from hospital autonomy would lead to improved health facility performance and eventually to expanded access to and utilisation of health services by the rural population. The improvement in the efficiency with which both the financial and non-financial resources are used would also mean that more resources are saved for other purposes. According to systems analysis and microeconomics theories, a health facility is, respectively, an independent component of the health system or an economic actor of supply. They propose that independent managers are best placed to find the best possible solutions to specific problems such as frequent stock-outs of drugs and other basic supplies and equipment. Health centre in-charges must have the authority to manage the resources under their control – such as how best to use their resources and

<sup>&</sup>lt;sup>5</sup> Frequent drug stock-outs and unavailability of most items have been continuously reported in the SWAp annual review reports.

to buy the best possible price-quality inputs from independent distributors. Without such authority, managers have little effect on the performance of their staff and facility operations.

#### 4.7.2 FEASIBILITY & SUSTAINABILITY

Making rural hospitals into cost centres is feasible and sustainable. Prior to the Decentralisation Act of 1998, 11 rural MOH hospitals were cost centres, and experience elsewhere has also demonstrated feasibility. Conversion should be done on a gradual basis, first in rural hospitals and then in health centres. The cost centre units would have to be staffed with trained financial personnel and be certified by an independent accounting firm before being allowed to produce their own budgets, receive funds transferred from the DHO, and manage their own funds. Like any other cost centre they would produce their annual budgets based on agreed ceilings; their monthly expenditure statements would be independently audited.

This type of was carried out in Ghana under the Sectorwide Approach (SWAp) II, and 302 of the 364 health centres are now independent cost centres which are operating successfully. Ghana is now a model of how to transfer resources to rural health facilities even where there are weak financial management systems. In Malawi, this could be done first with rural/community hospitals and then with health centres. A study tour to Ghana to learn on how this direct funding transfer to health centres works is strongly recommended.

Malawi could also start piloting an innovative system of Direct Facility Funding (DFF) of government health centres and dispensaries, as was piloted in Coast Province of Kenya between 2007 and 2010. It aimed at addressing the negative impacts of reducing user fees in health centres and dispensaries as per 2004 Kenyan government policy. The operation involved the following:

- Funds were allocated across districts, using the Kenyan MOH resource allocation criteria, and within districts; the breakdown across facility types was 85 percent to health centres and dispensaries, 10 percent to hospitals, and 5 percent to District Health Management Teams (DHMTs) to cover supervision.
- All MOH facilities with qualified staff were entitled to DFF, with funds allocated to individual facilities on the basis of workload and facility type (health centres received more than dispensaries).
- Funds were remitted directly into the bank accounts of each facility and DHMT.
- At the district level, the DHMT was responsible for DFF implementation. Key actors were the
  district medical officer for health (responsible for overall supervision), facility management
  nurse (supporting links between facilities, the community, and district), and the district
  accountant (responsible for financial management). Each facility had a Health Facility
  Committee made up of local community members and the officer in charge of the facility;
  this officer was trained in DFF and given responsibility for preparing quarterly workplans and
  budgets and managing DFF funds.
- Local communities were empowered to monitor DFF through their committee members and through display of facility utilisation and accounts data on blackboards at health facilities.
- Guidelines on expenditure items for DFF funds were developed and used in implementing DFF; for example, DFF could be spent only on 10 expenditure categories (salaries of support staff, utilities, supplies and services, etc.) excluding drugs, laboratory services, construction

of new buildings, sitting allowances of committee members, and salaries of professionally trained health workers.

In 2010, after 2.5 years of implementation, a study showed that DFF was perceived to have a highly positive impact: The support staff funding, outreach activities, renovations, patient referrals, and increases in health facility activity which DFF supported was perceived to have improved health worker motivation, quality of care, use of services (Opwora et al. 2010). The main challenges associated with the DFF transfer scheme were confusion over DFF operations, the continued overcharging of user fees, and very limited understanding of the DFF scheme amongst the broader community.

In conclusion, small increases in funding managed at the peripheral level may have a significant impact on performance, but must be accompanied by comprehensive training and documentation and strong emphasis on community engagement.

Apart from Ghana and Kenya, the MOH and Ministry of Local Government and Rural Development could also draw the lessons within Malawi from the Ministry of Education, Science and Technology, which under the Education Sector Support Project had a component on direct support to primary schools. Under this component, small amounts of funds were given, through the district education office directly to primary schools for relatively small routine maintenance and purchases of school items. Management of funds was being done by the local school committee. An audit and monitoring mechanism was put in place and those schools that demonstrated good management of funds were being rewarded with a higher second tranche. The MOH and Ministry of Local Government and Rural Development should consult with Ministry of Education, Science and Technology to find out the problems and successes of the exercise.

It is also feasible to split the DHO cost centre into two: one for the district hospital and the other for the peripheral health facilities including prevention and public health programmes. This is already happening in Malawi with districts with central hospitals — central hospitals such as Zomba, QECH, and KCH are cost centres — whilst DHOs within these districts are cost centres for rural hospitals, health centres, and prevention and public health programmes. Such a split would ensure that the district hospital where often the DHO cost centre is located, does not monopolise the limited resources.

# 4.7.3 EQUITY & ACCESS

The majority of health centres and rural hospitals are located where the majority of Malawians live – in rural areas. The experience of Ghana and Kenya shows that creating costs centres in rural health facilities leads to improvements in facility performance and in equity of access to and use of health care services by a greater number of poor people in great need of quality health care services.

# 4.7.4 TRANSPARENCY & ACCOUNTABILITY

Introducing a system of direct transfers to health centres and rural hospitals in Malawi would lead to improved transparency and accountability in the health sector. Currently there is little involvement of health centres, rural hospitals, or the communities they serve in budgeting, resource allocation, and financial management of health services – authority for these activities rests exclusively with the DHO.

# 4.8 STRENGTHEN PUBLIC-PRIVATE PARTNERSHIPS TO MAKE EFFICIENT USE OF RESOURCES

The MOH currently contracts 78 facilities in the CHAM network to provide free maternal health care. Through Service-level Agreements initiated in 2005, CHAM facilities receive a payment from the MOH to provide free services to all mothers, regardless of their ability to pay. The free delivery of care has increased demand for services, and thus the amounts required by CHAM facilities to provide services. The MOH already provides 48 percent of funding for the largest CHAM hospitals, and greater financial support from CHAM facilities may be required to ensure sustainability of Service-level Agreements.

The recently revised guidelines for Service-level Agreements propose a new financing mechanism that requires higher-income individuals to pay for services whilst maintaining free services for those who are unable to pay. The new proposed system works similarly to Malawi's Farmer Input Subsidy Programme. Local chiefs would distribute vouchers for free care at nearby CHAM facilities to poor residents in their area. CHAM facilities would then introduce user fees for maternal health services, only exempting patients with vouchers from chiefs. This would allow for poorer individuals to receive free care whilst generating revenue from those with the ability to pay. Generating more revenue at the facility might reduce the financial burden on the MOH, mitigating the trend of increasing payments for Service-level Agreements. The new voucher system is currently being piloted at Likuni Hospital in Lilongwe and could be introduced at more facilities, if shown to be effective.

It has been suggested that the MOH could contract other private health facilities to provide services, but negotiating such contracts would be difficult. The MOH can more easily negotiate agreements with CHAM facilities, because government already provides them funding for personnel. Lacking such a relationship with other private facilities, the MOH would likely need to pay more for contracts. For this reason, the present evaluation focuses on the possibility of expanding the voucher system rather than signing new Service-level Agreements with private providers.

# 4.8.1 FINANCIAL MAGNITUDE

The revenue generated from introduction of user fees at CHAM facilities will depend upon the number of vouchers that chiefs distribute. Providing more vouchers will result in fewer patients paying for services and thus less revenue for the facility. The number of vouchers distributed will need to be carefully calibrated to provide needy individuals with access to care whilst ensuring sufficient revenue from collection of user fees.

# **4.8.2 FEASIBILITY & SUSTAINABILITY**

A challenge with the voucher system is that it relies on chiefs' subjective judgment about individuals' ability to pay for health services. There is no quantitative benchmark stipulating which individuals should receive the vouchers. This creates the possibility of abuse, as chiefs may distribute vouchers to individuals they favour rather than those truly in need. To ensure appropriate use of the vouchers, the MOH would need to conduct periodic monitoring of their use.

#### 4.8.3 EQUITY & ACCESS

In theory, the voucher system could promote equity. Individuals with the ability to pay contribute to the needs of CHAM facilities, whilst those who cannot afford to pay are exempt from user fees. Such an effective balancing of financial responsibilities might strengthen the quality of service provision. In addition, if fewer resources are required from the MOH to support CHAM facilities, resources could be reallocated to other critical costs in the health system.

#### 4.8.4 TRANSPARENCY & ACCOUNTABILITY

As mentioned above, the voucher system is open to abuse by chiefs. In addition to periodic monitoring, some objective standard should be developed to guide the distribution of vouchers. Guidelines could be developed to specify what types of individuals should receive the vouchers. Individuals with disabilities or those without families to support them could be prioritised in the guidelines.

# 4.9 PROVIDE ADDITIONAL DONOR GRANTS DIRECTLY TOWARDS NATIONAL OR DISTRICT STRATEGIC PLANS

The need to align donor grants with national and district strategic plans has been well-articulated in development circles and research arenas (OECD, 2005). The Government of Malawi has moved in this direction by establishing coordination mechanisms for the health sector in the form of SWAp memoranda of understanding. Additionally, the government has created sector working groups in all ministries in recognition that better coordination of aid and alignment to government systems enhances efficiency and effectiveness, reduces duplication and ultimately improves health outcomes.

The advantage of putting resources directly into national and district plans is that it promotes effective partnership and coordination of health sector functions including financing, planning, and monitoring. Additionally, alignment of donor grants to national or district strategic plans facilitates coordination and cooperation on health sector strategy and work programmes and increases the ability to review sectoral performance based on jointly agreed milestones and targets.

#### 4.9.1 FINANCIAL MAGNITUDE

Greater alignment of donor grants to national and district strategic plans may not increase the total amount of funding available, but greater coordination has the potential to increase the efficient and effective use of available resources. Additionally, greater donor support for national and district strategic plans would indicate a shared commitment to move towards reliance on government financial management and accountability systems.

# 4.9.2 FEASIBILITY & SUSTAINABILITY

Providing grants directly to district plans is feasible and sustainable. Currently, districts are implementing health-related activities using DIPs. DIP development involves a thorough process that includes a detailed situational analysis that is used to inform prioritised budgeting. Planning of donor grants could be aligned with this process, thereby taking advantage of already-established health sector systems such as planning, budgeting, and reporting. Close alignment to strategic plans would require extensive donor cooperation and a joint spirit of partnership and ownership in order to be

sustainable. Whilst challenging, there are examples of donor alignment to national strategic plans through the SWAp system, indicating that such alignment is possible.

# 4.9.3 EQUITY & ACCESS

Alignment of donor grants with national and district strategic planning, such as in the form of a district SWAp, would mean a more coordinated health system and efficient resource allocation. Improved planning and coordination between stakeholders, donors, and the MOH could assist in ensuring that resources are distributed to populations and areas most in need, thereby increasing equity and access.

#### 4.9.4 TRANSPARENCY & ACCOUNTABILITY

District SWAps could promote transparency and accountability if careful monitoring procedures and strict accounting policies are established. Districts would be held accountable to report to government, donors, and the general population on where resources come from and how they are used. However, this would require financial skills and increased technical capacity at the district level in order to ensure that transparency and accountability are maintained.

# 4.10 SHIFT AND RATIONALISE FUNDING FOR SHORT-COURSE IN-SERVICE TRAINING TO ADEQUATELY FINANCE PRE-SERVICE TRAINING

Malawi suffers from significant shortages of health care workers. The situation was so critical in 2004 that the MOH and other stakeholders, including health development partners, developed a six-year Emergency Human Resource Plan (EHRP) to alleviate the shortages. Over the EHRP Programme of Work, the number of health workers has been increasing. However, although a crisis has been averted, Malawi still lacks sufficient health workers to effectively deliver EHP services and adequately respond to Malawians' other health care needs.

There are several reasons for the health care worker shortage: low motivation amongst health workers, weak human resource planning and management, inequalities in the distribution of health workers, and training institutions that do not produce adequate numbers of graduates to meet demand. Currently the majority of donor funding for human resources for health are earmarked for in-service training and workshops to support vertical programming. Redirecting funding to preservice training of new health care workers may be a more effective use of limited resources.

#### 4.10.1 FINANCIAL MAGNITUDE

Shifting funding from in-service training to pre-service training would not make a significant impact on overall availability of resources, and it would facilitate training of adequate numbers of nurses, clinical officers, medical assistants, allied health professionals, and physicians. Pre-service training may be a higher impact use of available funding.

# 4.10.2 FEASIBILITY & SUSTAINABILITY

Implementing the option is feasible and simply requires clear policy direction from government.

### 4.10.3 EQUITY & ACCESS

Implementing this objective would increase the numbers of health care workers and improve the ratio of skilled health workers to population. This is especially important for improving access to care in rural areas where access is currently limited by lack of health workers.

#### 4.10.4 TRANSPARENCY & ACCOUNTABILITY

Re-allocating funds from in-service training to pre-service training would not have a substantial impact on transparency and accountability. However, adequate records should be maintained in order to allocate health workers effectively and ensure that pre-service training is meeting necessary guidelines and standards and improving the number of health care workers available.

# 4.11 EXPLORE POSSIBILITIES FOR IDENTIFYING NON-NATIONALS IN MALAWIAN HEALTH FACILITIES AND CHARGING FEES TO THEM IN THE BORDER DISTRICTS

Social services such as health care are provided – and financed – based on the expected needs of a given population, defined in part by residence within certain geographic boundaries such as those of a country. However, in border regions, individuals from other countries may be accessing health services. This is true in Malawi. Given that the additional demand for services by non-nationals is usually not planned for, it creates pressure on the country's already resource-constrained service delivery systems. Additionally, it is unclear whether or not these non-nationals can afford to pay, as user fees are customary in neighbouring countries.

Introducing user fees for non-nationals in the border districts could expand the resource base of local service delivery systems and improve efficiency in resource allocation and use. Implementation of user fees for non-nationals would require correct identification of one's nationality. Clear identification of non-nationals will depend on the full implementation of the National Registration exercise, which is expected to result in the production of identity cards that will facilitate the identification of clients whether as Malawians or Non-Malawians accessing medical services in Malawi's health facilities.

#### **4.11.1 FINANCIAL MAGNITUDE**

Malawi is one of the few countries in sub-Saharan Africa that aim to provide free health care services to all citizens at the point of use. As such, there is evidence that health facilities along Malawi's borders serve a significant population of non-nationals. Charging user fees for non-nationals would represent a source of revenue that could support the provision of quality health care services and help ensure that free health services reach their intended target, Malawian citizens. An exact quantification of financial magnitude would require further study.

# **4.11.2 FEASIBILITY & SUSTAINABILITY**

Implementation of user fees for non-nationals requires correct identification of Malawians, who are eligible for free care because of their citizenship. The National Registration exercise is already underway and should provide the necessary identification of citizens.

Additionally, the feasibility and sustainability of this option rests on the fact that the demand for services by the health sector by non-nationals is expected to be inelastic even if national identity cards and user fees are introduced.

### 4.11.3 EQUITY & ACCESS

Implementation of user fees for non-nationals assumes a high marginal willingness to pay for health services amongst non-nationals whilst leaving with them an option to seek services from providers outside of the public health system. The success of such a fee would increase resources for the health sector in Malawi and therefore would increase equity and access in the sector, in particular for those who cannot pay for health services.

#### 4.11.4 TRANSPARENCY & ACCOUNTABILITY

With the use of national identity cards, the identification on non-nationals will be clear. However, this option calls for greater transparency and accountability to the general public by the system handling funds generated from foreigners using the Malawian health sector.

#### 4.12 DECONGEST CENTRAL HOSPITALS BY INTRODUCING BYPASS FEES

Congestion in Malawi health facilities, especially in district and central hospitals, is a substantial challenge. Although there are procedures in place to coordinate care at rural, district, and central levels, patients often bypass local health facilities and seek care directly at hospitals.

Mzuzu Central Hospital has implemented a bypass fee system – allowing only referred patients to receive hospital services for free, whilst requiring patients who have not been referred by their primary health facilities to pay a bypass fee of MK100 per patient. The system has helped to reduce congestion at the hospital and has generated revenues for it. Factors associated with choosing to bypass primary health facilities included income, traveling distance and time, dissatisfaction with the primary health facilities, limited services and lack of specialty care at lower-level facilities, and the quality and reputation of services and health care workers at those facilities.

# **4.12.1 FINANCIAL MAGNITUDE**

Improvement in managed care would allow for more effective and efficient use of health care resources. Currently, specialised doctors and facilities are burdened by patients with minor ailments, thereby restricting access to care intended for complicated and referral cases. Introducing bypass fees represents an opportunity for revenue generation and will help to ensure that more expensive, specialised care is reserved for complicated and referred cases.

# 4.12.2 FEASIBILITY & SUSTAINABILITY

This system is feasible in that referral systems are already in place. Fee collection systems would need to be established in facilities that currently lack them. Revenue generation from the collection of fees would help offset the cost of establishing these systems.

# 4.12.3 EQUITY & ACCESS

The bypass fee will improve access to health care services for more critically ill patients as the patients with minor cases will be able to get treatment at their designated health facilities and only those with complicated /referred cases will be treated at the central hospitals.

#### 4.12.4 TRANSPARENCY & ACCOUNTABILITY

The user fee collection system would require careful monitoring and assessment to ensure that user fees are collected and used as intended. Additionally, monitoring is needed to ensure that patients are being provided referrals based on need.

# 4.13 MAKE STRATEGIC INVESTMENTS AMONG HEALTH OR HEALTH-RELATED FUNCTIONS

Congestion in Malawian health facilities is caused by some cases which could be reduced by investing more resources in preventive and health promotion activities which entail more resources in social determinants of health. This involves the commitment by sectors other than heath such as education, agriculture, housing and environment to ensuring that their policies take into account health concerns of health of individuals and the population at large.

# 4.13.1 FINANCIAL MAGNITUDE

More investment preventive and health promotion activities could reduce considerably the number of cases demanding curative care which can be averted if more robust preventive programmes are in place.

# 4.13.2 FEASIBILITY & SUSTAINABILITY

There is evidence form the 2013 Malawi NHA that curative care services consume a significant proportion of resources and that more investment in could reduce the demand for curative care services which generally expensive than preventive ones.

# 4.13.3 EQUITY & ACCESS

This option will ensure that all existing policies resource allocation decisions in health and non-health sectors properly address health issues including health promotion needs by all segments of the population by ensuring that resource allocation decisions al.

# 4.13.4 TRANSPARENCY & ACCOUNTABILITY

Government will have to create an overarching enforcement framework for ensuring that policies and resource allocation decisions in all sectors address health issues which include health promotion needs of individuals

5. OBJECTIVE 3: GENERATE EVIDENCE TO DEVELOP HEALTH FINANCING APPROACHES BASED ON ACTUAL NEEDS AND COSTS WHILST ALSO BUILDING HEALTH FINANCING CAPACITY AT ALL LEVELS OF THE HEALTH SYSTEM

# 5.1 USE RESOURCE TRACKING MECHANISMS AND M&E TOOLS, IDENTIFY RESOURCE GAPS AND AREAS OF SURPLUS, AND ALLOCATE RESOURCES ACCORDINGLY

Actionable information is a prerequisite for sustainable health financing in Malawi. At present, a lack of evidence about current funding flows often paralyzes decision making, as leaders lack information about where to direct resources to maximise impact. Such inaction prolongs unsustainable patterns of health expenditure, as policymakers recognise problems but are unable to make changes. To move towards sustainable health financing in Malawi, decision makers require three types of tools:

- Resource Tracking Mechanisms: Detailed information about future budgets and recent expenditure patterns is essential to crafting effective health policy. Although figures regarding total available resources and aggregate expenditures are often available, this information is rarely detailed enough to specify allocations to specific districts, disease programmes, and intervention areas. The fragmented nature of the Malawi health sector makes it challenging to collect such information, as off-budget contributions from various donors comprise 73 percent of all available resources (MOH 2011a).
- 2. Two important tools exist for resource tracking: Resource mapping can be conducted annually to track budgeted resources in the health sector. Because budgets provide more detail than typical expenditure data, resource mapping can provide highly granular information, tailored to the needs of government. Information on allocations can be collected by category such as disease areas, interventions, and districts, depending on the needs of policymakers. Looking at the total projected resources available allows policymakers to anticipate deficits or surpluses in different categories and to take the necessary actions to address them. The downside is that budgets do not show how resources are spent, but this can be accomplished with further resource mapping or using NHA, an internationally recognised method that tracks health sector expenditures. NHA collects and analyses all health spending public, private, and donor in a country. An NHA exercise includes a household survey to estimate total national out-of-pocket health expenditure. Given that the NHA provides comprehensive statistics in the expenditure flows in the health sector just within a given time period, the NHA is most useful when it is conducted routinely.
- 3. **Monitoring & Evaluation Data:** Whilst tracking resources across the health sector is crucial, it is not sufficient by itself. To assess resources' impact, financial allocations must be compared with actual results from M&E data. If a significant investment is shown to not be producing the expected results, policymakers should modify or cease the activity.

At present in Malawi, financial information and M&E results are managed in silos, rarely analysed together. If financial management tools like Resource Mapping and NHA are to fulfil their ultimate goal, they must be used in conjunction with M&E results. For example, when the National AIDS Commission reviews year-end results of its annual workplan, M&E figures should be shown together with invested resources, in order to inform decisions about resource allocations in the subsequent year. Similarly, the M&E targets in the MOH Annual Implementation Plan should be coupled with information on the resources committed to each target. Such analysis will enable policymakers to make informed resource allocation decisions.

4. Costing of Needs: Finally, projections of future needs are essential for effective planning. Policymakers need detailed information not only about total health sector needs, but also about required resources in specific interventions like ART, malaria rapid diagnostic testing, and cancer drugs. Having costed interventions, analysts can compare this information with available resources, revealing funding gaps and surpluses throughout the health sector and enabling leaders to reprogramme funding as needed.

Although the HSSP has been costed, it appears to underestimate resource needs in certain areas. For example, a recent gap analysis showed the HSSP costing to have overfunded essential equipment and human resources, whereas it is widely acknowledged that these two areas suffer from a shortage of funding (MOH 2011a). Re-costing of the HSSP should be considered as part of the Health Financing Strategy, so that MOH leaders will have information about where the greatest funding gaps are.

#### 5.1.1 FINANCIAL MAGNITUDE

Health financing data do not directly increase revenue or efficiency. However, leaders can use the information to achieve these objectives. The findings of an accurate gap analysis become a resource mobilisation tool when the MOH uses them to make an evidence-based case to Treasury and donors for additional funding in areas of greatest need. In addition, health financing evidence can reveal opportunities for increased efficiency in the way resources are allocated and spent.

#### 5.1.2 FEASIBILITY & SUSTAINABILITY

Health financing evidence should be generated on a regular basis, rather than on an ad-hoc basis. However, using the resource tracking tools discussed above require significant resources and can be difficult to sustain. For example, it is only feasible to conduct the NHA household survey every few years, and even then, it often requires significant technical assistance from a donor. Resource mapping may require fewer resources, but only if data collection is limited only to the information most useful to the MOH. Similarly, re-costing a strategic plan can also require external assistance, and, as a needs assessment can quickly become outdated due to shifting needs and unit prices, it could be difficult for the MOH to sustain. To address these issues, it is crucial for the MOH to develop the internal capacity to conduct these interventions independently.

# 5.1.3 EQUITY & ACCESS

Improved health financing evidence enables better decision making, which should lead to increased equity and access to health care. In cases where a certain district or population is underserved,

resource tracking tools can identify the shortage and be used to justify a reprogramming of resources.

#### 5.1.4 TRANSPARENCY & ACCOUNTABILITY

Evidence is an important tool for ensuring accountability. If more people understand resource flows, concerns of corruption should be mitigated. Evidence about financing and M&E results also focuses stakeholders on impact. Leaders from donors and NGOs will ask tough questions about the funding decisions being made and the results being achieved, putting the onus on national leaders to be as transparent and accountable as possible.

# 5.2 TRAIN STAFF IN HEALTH FINANCING TOOLS/FRAMEWORKS SO THAT THEY OBTAIN THE SKILL SETS NECESSARY TO CONDUCT QUANTITATIVE AND RELIABLE ANALYSIS

As of now, few Malawian health planning and financial staff are trained in the range of health financing tools and frameworks that exist such as NHA, Resource Mapping, economic evaluation (e.g. Disability Adjusted Life Years), and burden of disease and frameworks such as the UNAIDS Investment Framework and the Global Malaria Action Plan. By developing the health financing skills of budgeting and planning officials, the government can do more robust analysis of current resource allocation, funding gaps, and needs for reprogramming. This is imperative in a resource-constrained environment as it enables maximum impact with the resources available.

# 5.2.1 FINANCIAL MAGNITUDE

Training staff in health financing tools will yield no direct additional revenue. However, two factors could impact the amount of available resources. Firstly, resources would be allocated more effectively to areas of greatest need and impact. Secondly, the MOH would be able to present stronger businesses cases to Treasury and donors for increased funding or resource allocations to prioritised interventions. In such a way, well-trained health finance staff would have a positive impact on the resource envelope.

The costs for training the estimated 398 finance staff are relatively low (Table 8). Holding five-day workshops for central hospital, district hospital, and headquarters staff is projected to cost US\$143,471, or US\$360 per person. Such trainings could be held annually to help institutionalise health financing knowledge and to keep staff up-to-date with the newest frameworks and tools. Although the net amount of resources gained or allocated differently cannot be estimated, the positive financial impact of such trainings could be quite large.

Table 8. Costs to Train Central and District Hospital, and Headquarters Staff

Туре	2011/12 Budget(MK)	Staff per Billion MK	Total Staff Trained	Cost
		Managed - 2009		
Central hospital	5,044,000,000,000	16.1	81	US\$32,313
District hospital	16,573,000,000,000	17.4	288	US\$104,426
HQ	9,062,000,000,000	3.2	29	US\$6,732
Total				US\$143,471

#### 5.2.2 FEASIBILITY & SUSTAINABILITY

The Malawian government will not have the capacity to train staff in health financing tools/frameworks until such skills are developed and institutionalised within the MOH. This means external assistance would be necessary for the initial training, either to conduct the training or to provide technical assistance to ministry officials to ensure they had the necessary skills to handle the training.

Total MOH spending for in-service training in 2012/13 was US\$6 million, of which only US\$4,700 was allocated for health reforms and financing. Although resource constraints are tight within the MOH, resources could be mustered internally to fund the training. Funding for the training could also be assisted by donors as many organisations are interested in enhancing the health financing capabilities of Ministry; making a business case for such funding would be feasible.

# 5.2.3 EQUITY & ACCESS

By training finance staff in health financing tools/frameworks, government would be better able to manage resources, identify costs, forecast need, and allocate more efficiently. The overall impact of such improvement would have a positive effect on equity and access. In an ideal situation, resources would be allocated in accordance with disease burden in the most impactful interventions, decreasing drug shortages, improving infrastructure, advancing patient coverage, and so forth. Granted, such a systemic change will take time as health financing skills are institutionalised within the MOH.

# 5.2.4 TRANSPARENCY & ACCOUNTABILITY

Perhaps the strongest argument for developing the health financing capabilities of MOH staff is to increase transparency and accountability. Increasing skills in this area will lead to improved financial management, reporting, costing, and resource allocation. By institutionalizing international standards and frameworks, government spending will become more transparent and accountable, not just to itself but to donors and the public. This will enable the ministry to present strong cases to donors and Treasury for why certain levels of funding are needed.

# 5.3 ENSURE THAT THE HSSP IS WELL-COSTED AND IS USED IN BUDGETING AND PLANNING

In March 2012 a formal and comprehensive HSSP was developed for 2011–2016. This strategic plan is the successor to the Programme of Work 2004–2010. The HSSP is the overarching strategic document for the health sector and is expected to guide government and non-government actors in prioritizing programmes and allocating resources.

Although the HSSP is a step in the right direction, it has several constraints. Firstly, it does not prioritise certain disease areas or interventions to the extent that it should in a resource-constrained and donor-driven environment. In accordance with the EHP, almost all health services are funded and provided for in the public health sector, which does not allow the government to allocate resources to identified priority diseases/interventions. Resources are spread too thinly across disease areas, minimizing impact. This lack of prioritisation hinders using the HSSP in a manner that informs planning and budgeting decisions.

Secondly, the MOH has recognised that certain HSSP objectives — essential basic equipment; standards, guidelines, and policies; health system strengthening; and other running costs — were not well costed. This prevents the government from effectively identifying and addressing resource gaps during the budgeting process.

#### **5.3.1 FINANCIAL MAGNITUDE**

Although no immediate direct revenue would result from re-costing the HSSP and improving its use during budgeting and planning, the financial implications of a well-costed HSSP could be significant, allowing the health sector to do more with less.

Firstly, a well-costed HSSP would enable the government to more precisely identify resource gaps and guide decisions about national health financing priorities. This would increase both technical and allocative efficiency so that resources are used in the most effective way possible. For example, data from the first round of the MOH Resource Mapping exercise revealed a US\$56 million gap for infrastructure and a US\$103 million gap for drugs and essential supplies – the two areas of the HSSP that were thought to be well-costed. If a re-costing was conducted, resources could be redirected from surplus areas to these areas of greatest need.

Secondly, a well-costed HSSP can theoretically have impact on the overall resource envelope. If the MOH develops a stronger understanding of its resource needs and gaps, the ministry would be able to make a stronger business case to donors and Treasury for additional resources.

# 5.3.2 FEASIBILITY & SUSTAINABILITY

The feasibility and sustainability of re-costing and improving the HSSP's use in planning is primarily dependent on the resources available. The MOH Department of Planning has voiced its desire to recost the HSSP; however, limited manpower within the department prevents such an undertaking. A re-costing would likely require outside technical assistance and substantial time and effort. However, if support for a re-costing is widespread, and if donors or other organisations are willing to provide technical assistance, a re-costing is feasible in the short term. Otherwise, re-costing will have to remain a long-term priority for the ministry.

If the effort is conducted by external technical assistance, the sustainability of re-costing is impacted. In 2011/12, when the HSSP was developed, a majority of the costing was conducted by external technical assistance. Whilst the assistance was valuable and necessary at the time, it created a knowledge gap at the ministry as to how the costing was completed – diminishing its use. To increase the sustainability of re-costing and utilising the HSSP, the MOH needs to be intimately involved so that the knowledge is institutionalised.

# 5.3.3 EQUITY & ACCESS

Equity and access could be improved through a well-costed and utilised HSSP. By identifying gaps and allocating resources more effectively, wasteful spending could be reduced. Depending on resource needs, reallocations could take place in infrastructure, commodities, and capacity building, thereby improving the overall health system. As illustrated earlier, gaps have been identified in infrastructure and essential medicines and supplies. If additional resources were shifted to these

areas, disruptions in the delivery and supply of commodities could be decreased, advancing treatment coverage and access to patients.

#### 5.3.4 TRANSPARENCY & ACCOUNTABILITY

A robust HSSP costing coupled with increased usage in planning would increase transparency and accountability at the national and district level. Transparency would increase as health needs would be clearly showcased, especially when integrated with resource mapping, M&E targets, and investment frameworks. This would provide donors and government with greater insight in how resources should be allocated

Accountability could be enhanced if government and donors were held accountable for using the HSSP during planning and strategic processes. As of now, the HSSP is underutilised during planning due to unclear costing and an uncertain understanding as to what gaps exist. If donors and government were required to actively show HSSP use during the planning process, accountability for how programmes are created and how resources are allocated would be improved. If donors were required to use the HSSP for planning, government would be able to ensure that external resources are aligned with HSSP priorities.

# 5.4 ANALYZING COST-EFFECTIVENESS OF HEALTH INVENTIONS

Cost-effectiveness analysis is a type of economic evaluation that examines costs as well as associated health outcomes of certain interventions. The analysis compares the cost of an intervention to its effectiveness in natural health outcomes e.g., "cases prevented" or "years of life saved. It is generally used in resource allocation decisions, helping to measure which interventions are the most cost effective — a crucial consideration in a resource-constrained environment like Malawi. For example, the MOH may have to choose between allocating resources to a Behaviour Change Campaign to prevent HIV or to medical male circumcision. Both options have a common health outcome: lessening the number of HIV transmissions. By conducting a cost-effective analysis, we can likely determine which option prevents the most transmissions at the least cost.

Evidence also suggests that health spending may not be focused on activities that have the greatest impact at the least cost – that is, value for money. It is estimated that non-service delivery costs – technical assistance, administration/overhead, procurement and supply chain management, training (in-service), management/supervision, and research – consume almost 40 percent of total health spending. Although many of these costs are necessary for a well-functioning health system, decision makers need to assess which interventions are the most cost effective and what proportion of resources should be diverted to interventions that directly reach the people (MOH 2011a).

# 5.4.1 FINANCIAL MAGNITUDE

Whilst no direct revenue will be gained from conducting cost-effectiveness analyses, allocative efficiencies will certainly be achieved, enabling government to do more with less. By using this analytical method, the most cost-effective interventions can be identified so that government can prioritise interventions with the limited number of available resources to maximise impact. Additionally, demonstrating to donors and Treasury that efficiency gains have been made and that resources are being spent in the wisest way possible increases the potential for additional funding.

#### 5.4.2 FEASIBILITY & SUSTAINABILITY

Engaging in cost-effectiveness analysis is sustainable as long as it is incorporated into the budgeting process and accurate data are available. The primary issue is feasibility since this type of analysis requires an analytical skill set, knowledge of currently available resources, and outcome indicators. If this type of knowledge can be developed and institutionalised within MOH and at the district level, then this type of analysis is feasible for the ministry.

#### 5.4.3 EQUITY & ACCESS

Equity and access would be improved only if the MOH began conducting cost-effectiveness analyses of health interventions. In a resource-constrained environment, it is essential to allocate the limited number of resources to the most impactful and least costly interventions. Such analysis would maximise impact, leading to improved health outcomes, access, and equity for the general population.

# 5.4.4 TRANSPARENCY & ACCOUNTABILITY

As cost-effectiveness analysis is empirical and evidence based, it leads to enhanced transparency and accountability, ultimately increasing the credibility of resource allocation decisions.

# 5.5 ENGAGE PARTNERS IN CENTRAL AND DISTRICT PLANNING PROCESSES, USING PARTNERS AND RESOURCE MAPPING TOOLS FOR PROPER RATIONALISATION OF BUDGETS

The Malawian health sector is characterised by a number of organisations implementing health-related interventions using donor resources. Given that some donors prefer to deal directly with partners without involving central-level planning, there is a risk that planning at the central and district level does not reflect planned work by partners implementing off-budget resources. This is quite often the case in districts, in which the DHO is unaware of partners operating in their district. To improve coordination and ensure that partner activities are well coordinated, it is paramount that government, donors, and implementers effectively communicate so that resources can be used in the most effective way possible.

To assist with this, government can engage in resource and stakeholder mapping analyses so that they are able to identify where resources are flowing and who is implementing them. This will empower government to open lines of communication with partners, as well as assist in developing stricter protocols as to how resources are implemented.

# 5.5.1 FINANCIAL MAGNITUDE

Whilst no direct revenue will be gained from engaging partners in central and district planning processes, allocative efficiencies will be achieved. This will be due to greater stakeholder involvement in budgeting, and to alignment of off-budget resources with government priorities.

#### 5.5.2 FEASIBILITY & SUSTAINABILITY

The feasibility and sustainability of involving partners in planning is highly contingent on government leadership. Government needs to implement strict protocols that require partners to be involved in planning processes at both national and district levels. This will be further complimented by resource

and partner tracking, which will help provide guidance as to how off-budget resources should be allocated.

# 5.5.3 EQUITY & ACCESS

By engaging in partner and resource mapping, and by ensuring that off-budget resources are aligned with government priorities, the allocation of public health resources will be optimised. Such coordination will ensure that resources are allocated to the areas of greatest need, contributing to positive impact in both equity and access.

# 5.5.4 TRANSPARENCY & ACCOUNTABILITY

Engaging partners in government planning only serves to promote transparency and accountability. By institutionalizing resource/partner tracking exercises and by creating systems in which partners are required to work in planning processes, transparency and accountability in how resources are spent will increase. It will permit government and partners alike to understand resource allocation and to ensure that resources are being spent in the most cost-effective way possible.

# 6. CONCLUSION

The Malawi health sector's high reliance on external funding necessitates a comprehensive review of how services are financed, and the Health Financing Strategy provides such an opportunity. Stakeholders agree that the present trajectory of health financing in Malawi presents challenges for sustainability, and reforms are needed to ensure the provision of universal coverage for health care. The above analysis seeks to guide stakeholders' decisions about what to include in the strategy, highlighting the financial magnitude of proposed reform options as well as their implications for sustainability, equity, and accountability.

The options for revenue generation evaluated in this report include fuel levies, sin taxes, visa fees, a corporate tax, lotteries, user fees, and a trust fund. There is also the potential to increase private sector investment in the health sector by a significant margin (US\$22 million to US\$28 million). This report also assessed the prospects of bringing government's allocation to health to 15 percent of the total public budget.

The report also evaluated options for increasing allocative and technical efficiency in the health sector. Allocating resources to high-priority areas would increase the total amount of funding for those crucial programmes. Efficiency could also come in form of maximizing distribution and impact of health workers. Relatively small incremental increases in funding for pre-service training could have an important impact in alleviating Malawi's health worker shortage. Similarly, if disbursement of funding to districts and health facilities was made on time, facilities would be in a better position to plan, execute procurement, and deliver services. Collapsing parallel supply chains into the Central Medical Stores Trust would likely create economies of scale, as only one system would be needed for procurement, storage, and distribution. Nevertheless, simply reducing procurement and supply chain management costs to the current levels of the CMS could save US\$11.2 million annually. PBF does not directly increase efficiency, but it can improve the quality of health services and overall performance of health facilities.

The above analysis also evaluates options for building health financing capacity. A lack of evidence about current funding flows often paralyzes decision making, as leaders lack information about where to direct resources. To address this gap, government can more effectively track resources and use M&E data to assess the impact of financial inputs.

# **REFERENCES**

- Acharya, A., Vellakkal, S., Taylor, F., Masset, E., Satija, A., Burke, M., Ebrahim, S. (2012) Impact of National Health Insurance for the Poor and the Informal Sector: A Systematic Review. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. Accessed at: http://r4d.dfid.gov.uk/PDF/Outputs/SystematicReviews/Health-insurance-2012Acharya-report.pdf
- Blas, E., Limbambala, M. 2001. "User-Payment, decentralization, and health service utilization in Zambia." Oxford University Press.
- Bodark, C., Litvack, J. 1993. "User fees plus quality equals improved access to health care: results of a field experiment in Cameroon." World Bank.
- Chombah, J. 2009. "President's alcohol levy punishes SABMiller's Botswana subsidiary." Money Web.
- Eichler, R., Levine, R. 2009. *Performance Incentives for Health: Potential and Pitfalls*. Performance-Based Incentives Working Group
- Falkingham J., et al. 2009. *Trends in out-of-pocket payments for health care in Kyrgyzstan*, 2001–2007, BioMedi Central
- National Statistics Office. 2012. Malawi 2010/2011 Integrated Household Survey.
- KPMG. 2013. Corporate tax rates table. Accessed at: http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/corporate-tax-rates-table.aspx
- Mills, A.J., Mwambaghi, F. 1995. SWAp Technical Report.
- Ministry of Health. 2011a. Round 1 Resource Mapping. Government of Malawi.
- Ministry of Health. 2011b. SWAp Financial Management Review Report. Government of Malawi. Lilongwe, Malawi.
- Ministry of Health. 2011c. Workforce Optimization Analysis Report. Government of Malawi. Lilongwe, Malawi.
- Ministry of Health. 2012a. Malawi National Heath Accounts with subaccounts for HIV/AIDS, Malaria, Reproductive Health, and Child Health for Financial Years 2006/07, 2007/08, and 2008/09. Government of Malawi, Ministry of Health, Department of Health Planning and Policy Development. Lilongwe, Malawi.
- Ministry of Health. 2012b. Resource Mapping Exercise. Government of Malawi. Lilongwe, Malawi.
- Ministry of Health. 2012c. Resource Mapping data, PSI, and Global Fund budgets for SSF HIV grant, Round 7 Malaria, Round 9 Malaria grant. Government of Malawi. Lilongwe, Malawi.

- Ministry of Tourism. 2011. Malawi Tourism Report 2010/11. Government of Malawi. Lilongwe, Malawi.
- Moore, M., Conteh, L. 2010: *Review of Pay for Performance –Overview and Key findings*. Report completed for in Scale Project, London School of Hygiene and Tropical Medicine
- National Oil Company of Malawi. 2012. Growth Forecasts Report.
- Nyasa Times, 2012: Malawi Lottery Bosses bolt after shutdown. Accessed at: http://www.nyasatimes.com/malawi/2012/08/02/malawi-lottery-bosses-bolt-after-shutdown/
- Opwora, A., Kabare, M., Molyneux, S., and Goodman, C. 2010. *Direct facility funding as a response to user fee reduction: Implementation and perceived impact among Kenyan health centers and dispensaries*. Health Policy and Planning. Oxford University Press, 2010:1-13.
- Organization for Economic Cooperation and Development (OECD). 2005. Paris Declaration on Aid Effectiveness (2005) and the Accra Agenda for Action (2008). Accessed at: http://www.oecd.org/development/effectiveness/34428351.pdf
- Schabbel, C. 2007. The Value Chain of Foreign Aid: Development, Poverty Reduction, and Regional Conditions
- Sebonego, P. 2011. "Alcohol Levy in Botswana and Other Government Interventions on Alcohol Abuse". Ministry of Health; Alcohol and Substance Abuse Division.
- Shiu, A., Lam, P. 2008. "Relationships between Economic Growth, Telecommunications Development and Productivity Growth: Evidence Around the World".
- Telecom Paris Tech, Toulouse School of Economics. 2008. "Cellular Demands Analysis in South Africa: Urban vs Rural Patterns of Consumption".
- United Nations Development Programme (UNDP). 2012. Innovative Financing for Development: A New Model for Development Finance? Discussion Paper. Bureau for Development Policy. One United Nations Plaza. New York, NY 10017, USA. Accessed at: www.francophonie.org/IMG/pdf/PNUD\_InnovativeFinancing.pdf
- USAID TRAction Project. 2011. "Effects of Performance Based Financing on Maternal Care in Developing Countries: Access, Utilization, Coverage, and Health Impact."
- World Health Organisation. 2005. Improving Health System Financing in Low Income Countries. Accessed at: <a href="http://www.who.int/management/background">http://www.who.int/management/background</a> 5.pdf
- Zanzibar Ministry of Health. 2012. Health Financing Reform in Zanzibar, Presentation at Health Financing Summit in Swaziland.