



USAID
FROM THE AMERICAN PEOPLE



USAID HFG PROJECT TB STRATEGIC PURCHASING ACTIVITY MALAWI ASSESSMENT TECHNICAL REPORT



October 2015

This publication was produced for review by the United States Agency for International Development.

It was prepared by Peter Cowley, Sheila O'Dougherty and Sara Feinstein for the Health Finance and Governance Project.

The Health Finance and Governance Project

USAID's Health Finance and Governance (HFG) project helps to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team works with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. The five-year, \$209 million global project is intended to increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG supports countries as they navigate the economic transitions needed to achieve universal health care.

OCTOBER 2015

Cooperative Agreement No: AID-OAA-A-12-00080

Submitted to: Scott Stewart, AOR
Office of Health Systems
Bureau for Global Health

Recommended Citation: Cowley, Peter, O'Dougherty, Sheila and Feinstein, Sara. October 2015. *USAID HFG Project TB Strategic Purchasing Activity Malawi Assessment Technical Report*. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.



Abt Associates Inc. | 4550 Montgomery Avenue, Suite 800 North | Bethesda, Maryland 20814
T: 301.347.5000 | F: 301.652.3916 | www.abtassociates.com

Avenir Health | Broad Branch Associates | Development Alternatives Inc. (DAI) |
| Johns Hopkins Bloomberg School of Public Health (JHSPH) | Results for Development Institute (R4D)
| RTI International | Training Resources Group, Inc. (TRG)



USAID HFG PROJECT TB STRATEGIC PURCHASING ACTIVITY MALAWI ASSESSMENT TECHNICAL REPORT

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development (USAID) or the United States Government.

CONTENTS

Contents	i
Acronyms	iii
1. Introduction	1
2. TB Continuum of Care Gaps that TB Purchasing and PFM Improvements should Help Fill	3
3. Overall Strategy and Sequencing for TB Purchasing and PFM Improvement	5
4. Shorter-Term Purchasing and PFM Steps to Enable Desired TB Service Delivery Improvements	7
4.1 Insufficient Revenue	8
4.2 Improve Initial Planning and Budgeting	8
4.3 Flexibility to Revise Plans and Budgets: Best Mix of Inputs to Produce Desired TB Continuum of Care Outputs	9
4.4 NTP Domestic Revenue and Global Fund Grants	13
4.5 TB and HIV	13
4.6 District Health Expenditures	14
4.7 Private Providers	14
5. Relationship Between Shorter-Term TB Purchasing and PFM steps and Longer-Term Public Service and Health Reforms	15
5.1 Envisioning Longer-Term Public Service and Health Reforms	15
5.2 Step-by-Step Implementation or Sequencing to Move from Shorter-Term Steps to Longer-Term Public Service and Health Reforms While Protecting Priority Services Including TB and Poor Populations	18
5.3 Provider or Management Side	19
Annex I: Meetings Conducted	21



List of Tables

Table 1: Stakeholders	21
-----------------------------	----

List of Figures

Figure 1: TB Continuum of Care	4
Figure 2: Overall Strategy and Sequencing Option	5
Figure 2: Pooling & Purchasing Functions	16
Figure 3: Kyrgyzstan Model	17

ACRONYMS

BBP	Basic Benefits Package
BU	Bottom-Up
CHAM	Christian Health Association of Malawi
DHO	District Health Office
DIP	District Implementation Plan
IFMIS	Integrated Financial Management Information System
ISRR	Institutional Structure, Roles and Relationships
ORT	Other Recurrent Transactions
MCH	Maternal and Child Health
MWK	Malawi Kwacha
MOF	Ministry of Finance
MOH	Ministry of Health
NHIS	National Health Insurance Scheme
NTP	National Tuberculosis Program
PE	Personal Emolument
PFM	Public Financial Management
PHC	Public Health Centers
RBF	Results-Based Financing
SAC	Sex and Age Coefficients
SHI	Social Health Insurance
TB	Tuberculosis
TD	Top-Down
USAID	United States Agency for International Development
WHO	World Health Organization



I. INTRODUCTION

The purpose of the USAID Health Financing and Governance Project (HFG) TB Strategic Purchasing Activity is to identify and recommend small improvements in TB purchasing/provider payment and related public finance management (PFM) mechanism to better target country health budgets towards priority TB services for the poor in USAID TB priority countries. This technical report summarizes the rapid assessment findings, conclusions, recommendations, and possible next steps from stakeholder consultations held in Malawi from May 18-29.

The three health financing functions are revenue collection, pooling and purchasing. Revenue collection is the source/level of funds, pooling is the accumulation of prepaid revenues on behalf of a population and purchasing is the transfer of pooled funds to providers on behalf of a population. The main focus of the HFG/TB Activity is the health purchasing function, specifically provider payment systems and PFM mechanisms. This rapid assessment focuses more on domestic revenue health purchasing and PFM at the district level as other USAID investments are supporting NTP and Global Fund grant implementation. This assessment emphasizes public funding as public funding is critical to pro-poor priority public health services especially TB.

This rapid assessment is not intended to be a literature review or formal study. Stakeholder consultations are the main vehicle for identifying and recommending small TB purchasing and PFM improvement steps for possible further in-depth analysis and implementation. The rapid assessment technical report is organized into five sections: 1) introduction; 2) TB continuum of care gaps; 3) overall strategy and sequencing; 4) shorter-term TB purchasing and PFM steps; and 5) relationship between shorter-term steps and longer-term public service and health reforms.

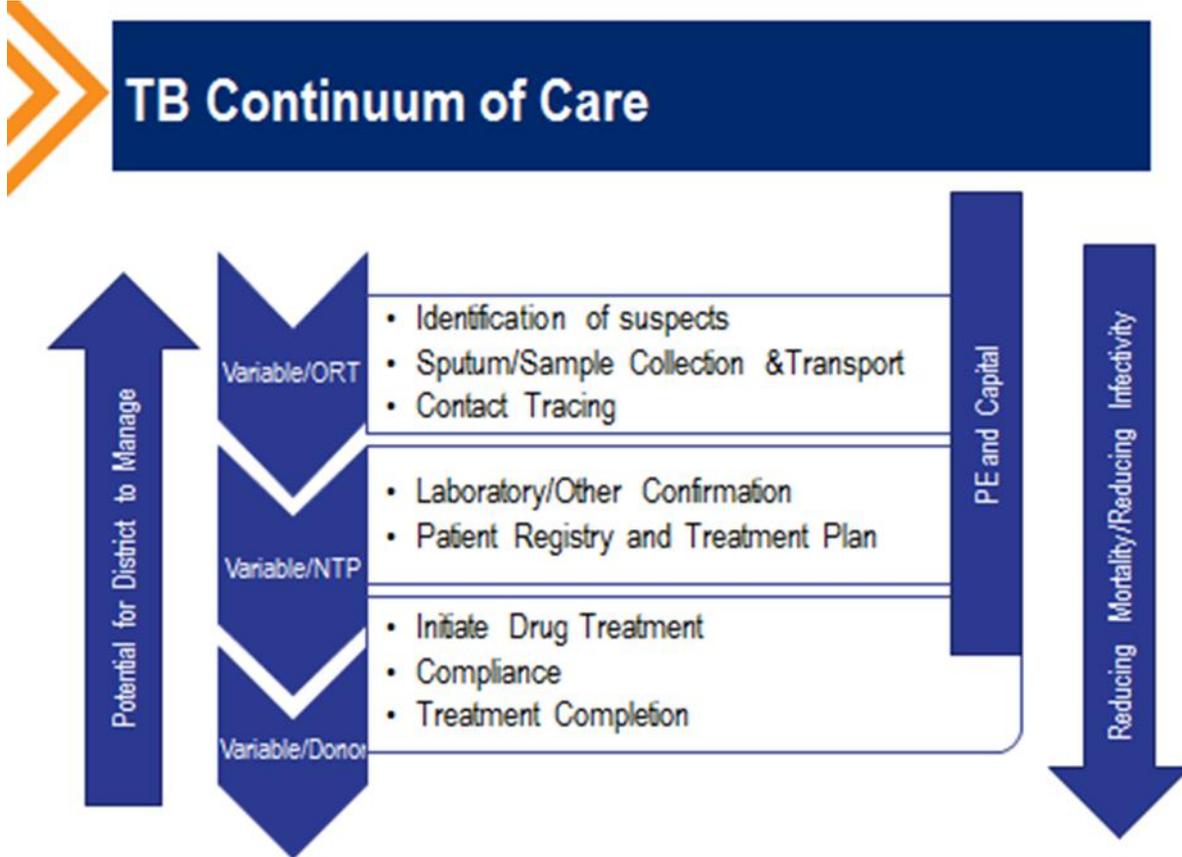


2. TB CONTINUUM OF CARE GAPS THAT TB PURCHASING AND PFM IMPROVEMENTS SHOULD HELP FILL

Isolating key relationships and gaps in the TB continuum of care (from identifying suspect cases to treatment completion for those cases in need of TB drugs) and linking shorter-term TB purchasing/provider payment and PFM improvements to them can contribute to reducing mortality from TB, while at the same time providing first steps towards longer-term public service and health reform efforts.

The figure below demonstrates the links between variable costs and specific sequential steps in the TB continuum of care. If funds for variable costs are not made available for that particular step during a set disease progression window, then movement towards treatment completion – with inherent gains in mortality and morbidity reduction thru reductions in case fatality and TB infectivity – is in effect halted and can even be reversed. The figure below also illustrates that the relative ability for DHO/health facilities to have influence over a particular variable cost funding source declines the further along a patient goes in the TB continuum of care. In effect, DHO/health facility managed budgets are one of the earliest purchasing/provider payment influences in the TB continuum of care. If expenditures from ORT budget sub-line items managed by the DHO/health facility are not made available for critical steps such as transport of sputum or contact tracing, then many patients will never be diagnosed or make it to the treatment part of the TB continuum of care. Some of these patients will be diagnosed at a later stage in disease progression, where there are larger amounts of funding for variable costs such as drugs, reagents, and supplies through NTP and donor sources. In effect, robust funding is made available for later stages of the TB continuum of care, but it requires public budget expenditures in the ORT budget line item, through the DHO, as well as PE expenditures, to make sure that the TB suspect is identified and tested in the first place. A TB patient has to reach the treatment completion stage of the TB continuum of care in the timeliest fashion possible in order to maximize mortality gains especially through reductions in dynamic transmission. TB purchasing/provider payment and PFM steps to improve timeliness, management and effectiveness of case finding are elaborated in Section IV.

Figure 1: TB Continuum of Care

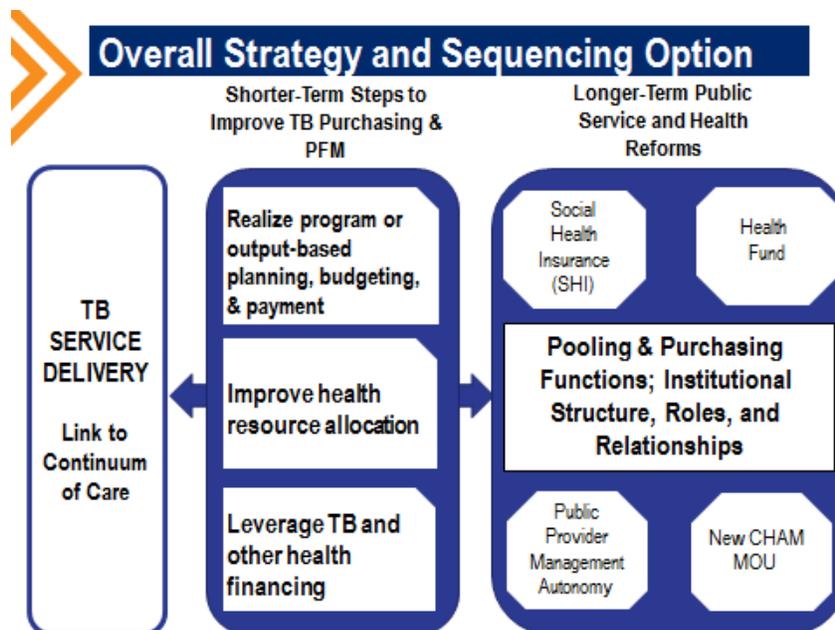


3. OVERALL STRATEGY AND SEQUENCING FOR TB PURCHASING AND PFM IMPROVEMENT

The figure below portrays an overall strategy and sequencing option for TB purchasing and PFM improvement. The middle block contains three interrelated shorter-term steps that could improve TB purchasing/provider payment and PFM: 1) realize program or output-based planning, budgeting and payment; 2) improve allocation of health budget; and 3) leverage TB financing and other health financing. These three shorter-term TB purchasing/provider payment and PFM improvement steps should enable desired TB service delivery improvements on the left.

The three shorter-term TB purchasing/provider payment and PFM improvement steps should also have a direct linkage to Malawi’s broader public service and health reforms on the right, in essence comprising first steps consistent with implementation sequencing for public service and health reforms. Stakeholder consultations revealed consensus on Malawi’s four planned major reforms as represented by the four squares: 1) introduce Social Health Insurance (SHI); 2) establish a “Health Fund” (consultants’ were informed that it would contain “sin” taxes and other health revenue) 3) increase public provider management autonomy; and 4) new Memorandum of Understanding (or agreement or contracting) with Christian Health Association of Malawi (CHAM). Based on international experience, the consultants posit that relationships or synergies can be created between these four health reforms to optimize their implementation and impact in Malawi. These relationships or synergies are represented in the figure as the larger square in the middle of the four health reforms and consist of two elements or interventions. First is improve pooling and purchasing arrangements and second is improve health sector institutional structure, roles and relationships (ISRR). Specific aspects of this overall strategy and sequencing option are detailed in the three sections below.

Figure 2: Overall Strategy and Sequencing Option



4. SHORTER-TERM PURCHASING AND PFM STEPS TO ENABLE DESIRED TB SERVICE DELIVERY IMPROVEMENTS

The possible shorter-term TB purchasing and PFM steps described below are categorized into realize program or output-based planning, budgeting and payment; improve allocation of resources; and leverage TB financing and other health financing. Detailed findings from stakeholder consultations supporting the conclusions and recommendations in this section are contained in Section V. In addition, the final report will further validate conclusions and recommendations by obtaining and analyzing planning and financial documents viewed in stakeholder consultations and also reference other related reports.

1. Realize Program or Output-Based Planning, Budgeting and Payment

As shown in the overall strategy and sequencing figure and the TB continuum of care figure above, full realization of program or output-based planning, budgeting and payment should enable the National TB Program (NTP) and corresponding district health officers and health facilities to better plan, budget and pay for TB services thus filling gaps in the TB continuum of care from identification of suspects through treatment completion. Districts receive budget ceilings already separated by sector meaning that the district health budget ceiling is set at the national level. The three main budget line items within the country finance system and district-level health budget are personnel emoluments (PE), other recurrent transactions (ORT), and development or capital expenditures. PE and capital are largely budgeted at the national level, and ORT at the district level. Therefore, the decentralization or planning and budgeting flexibility at the district level largely relates to the ORT budget line item and its sub-line items¹.

District Health Offices (DHOs) begin the ORT planning, budgeting and payment cycle from the bottom-up by obtaining input on plans from health facilities. Planning worksheets viewed by consultants were comprehensive and consisted of links to Malawi Growth and Development Strategy and Health Sector Strategic Plan, statement of objectives and outputs, description of activity, and ORT sub-line item budget required to achieve the planned activity producing the desired output. Budget sub-line items were aggregated into a total district health ORT budget also viewed by consultants and then further aggregated up into total health ORT budgets. After budgets are approved, they are entered into MOF/Treasury/IFMIS² systems with ceilings or expenditure caps for health expenditure control at ORT sub-line item level. This means, for example, that if the District Health Office budgets 10 million kwacha for fuel for the year, and the budget is approved, the DHO will require specific authorization to spend over this amount on fuel, even if the DHO has sufficient funds in its overall budget.

¹ Different terminology is often used both internationally and within Malawi (e.g. line items, chart of accounts, economic classification, activity codes, chapters) but for purposes of this report terminology will be line items (PE, ORT, capital) and sub line-items (e.g. fuel, drugs, supplies, food).

² IFMIS refers to both national level EPICOR and district level Scenic Navigator systems.

Stakeholder consultations revealed consensus that DHOs and health facilities have significant problems managing or controlling ORT health expenditures within these ORT sub-line item hard ceilings or expenditure caps. As described below, in general there are three main reasons for these management or control problems.

4.1 Insufficient Revenue

Malawi Government general policy is that public provider health services are free for the entire population. There can be little or no doubt that there is insufficient public ORT health funding to provide all health services for free. There can also be little doubt that the nature of the budgeting formation process provides incentives to initially overstate budget need in order to manage the dynamics of inevitable and potentially non-transparent budget cuts. A district level example illustrates the scope of problems arising from the combination of insufficient health revenue and incentives driving chronically unrealistic budgeting. In one particular district, the final ORT budget ceiling was only 25% of the budget estimate derived from the bottom-up planning process. Even assuming extraordinary DHO and health facility efforts, it is almost impossible to imagine management improvements and efficiency gains that could fill this budget gap.

Clearly, more health funding is needed, and the four major national public service and health reforms plan to address health revenue. That said, Malawi has a major advantage or asset to maintain in that policies and programs to increase health sector revenue have not yet resulted in the unintended consequence of creating inefficiencies in the health system through fragmentation, conflicting financial incentives at the provider level or introduction of payment systems such as fee-for-service which international experience has shown can increase costs without corresponding improvements in health outcomes. Malawi could consider how to avoid emergence of these inefficiencies as revenue and resource mobilization strategies are developed (see Section IV).

4.2 Improve Initial Planning and Budgeting

While planning and budgeting at the district level can always be improved, the consultants' opinion from stakeholder consultations is that initial health sector planning and budgeting processes are generally done conscientiously and well by DHOs. Again, the planning and budgeting worksheets viewed by the consultants' link activities to country strategies, objectives and outputs and then attach budget to activities. Budgets are then aggregated to district ORT sub-line item level. Because providers on the primary and secondary level do not charge any user fees, they have no funds outside of this ORT budget, so they are very constrained by the budget.

Currently, health purchasing consists of planning by output but not paying providers for outputs. While the DHO prepares plans by output and activity and costs these activities, the DHO then has to divide the cost for each activity into ORT sub-line items for the budget. The input-based budget payment system makes it very difficult to actually match payment to prioritized TB or health outputs. As discussed below under longer-term reforms (Section IV), a gradual shift to output-based payment would allow the MOH, DHOs and health facilities to better match payment to health priorities and plans. This step will require harmonization of health financing reforms and PFM.

4.2.1 Enhance Health Facility Input to Budget Development

While it appears that a bottom-up planning process occurs such that input on plans is obtained from health facilities, it is less clear that a bottom-up budgeting process accompanies the planning process as some health facilities noted they did not have input on their budget. As health facility in-charge managers

are best able to determine their budget needs for TB services (and all health services), their input should be formally obtained in order to enhance the budget formation process. In effect, the decentralization to the district level could be further extended to the health facility level by at least obtaining budget input from all health facilities. And this is true even if DHO has to be responsible to make the final difficult ORT sub-line item budget decisions.

Recommendation #1: Together with their input on plans, DHOs should formally obtain budget input from all health facility in-charge managers for TB and all health services.

Possible Next Step #1: Deeper assessment, recommendations and suggested plan/budget system and process improvements to help ensure DHOs obtain and document budget input from health facilities.

4.2.2 Strengthen Planning and Budgeting Systems to Encompass Budget Revision Dynamics

Given that the final ORT budget ceiling is often received late in the process, it appears likely that the initial plans with their comprehensive strategy links, objectives, outputs, and activities are not recalibrated to the final ORT budget line-item and sub-line item ceilings thus reducing the linkage between plans and final budgets. It must be frustrating to engage in a comprehensive planning process to find that only 25% of funding needed to produce activities and outputs will be included in the final ORT budget. And understandably difficult to reach DHO/health facility consensus on how to cut outputs and activities so radically to meet the final ORT budget ceiling in a budget process requiring scrambling to meet deadlines. Nevertheless, it's important to TB program and all health program budgeting that this final reconciliation of plans and budgets occur so that health program priorities are clear and DHOs/health facilities can manage to these budgets and payment is matched to the highest priority activities, services and outputs.

Recommendation #2: After final ORT budget ceiling is received, DHOs/health facilities should reduce budgets by adjustment of final comprehensive planning and budgeting worksheets rather than just by reducing or adjusting aggregated ORT sub-line item budget to avoid losing the link between planning and budgeting, and helping to ensure that payment is matched to the highest priority health activities, services and outputs.

Possible Next Step #2: Develop internal DHO and health facility information system improvements to support and facilitate quick and comprehensive plan and budget revision in response to reduction in ORT budget ceilings.

4.3 Flexibility to Revise Plans and Budgets: Best Mix of Inputs to Produce Desired TB Continuum of Care Outputs

A third reason that DHOs and health facilities may have significant problems managing or controlling ORT health expenditures to produce critical outputs in the TB continuum of care is lack of management autonomy or flexibility in PFM systems or procedures. Once budgets are approved, hard ceilings or expenditure caps are placed on ORT sub-line item in MOF/Treasury/Integrated Financial Management Information System (IFMIS) systems and procedures. In a perfect world, initial annual budgets can be developed that do not require adjustment throughout the year. However, managing production of most products or services in either public or private sectors usually requires adjustment of budgets to environment, market, or other factors throughout the year and the more volatile the environment the more budget adjustments are likely to be needed. In other words, continuous monitoring and adjustment of budgets and other management levers can be considered a sign of continuous

improvement or good management rather than bad management. In Malawi, limited resources and a volatile economic environment including price increases (price increases related to fuel are often mentioned with current gasoline prices around MK800/liter or \$8/gallon) make it hard to create an initial annual ORT sub-line item budget that does not require some adjustment or revision throughout the year.

The consultants' understanding is that currently hard ceilings or expenditure caps are placed at the ORT sub-line item level. Therefore, formal approval and finance system changes are required to adjust budgets or move funding across ORT sub-line items during the year. There is a process for these budget revision changes but stakeholder consensus was that it is very difficult to receive these approvals and in practice it virtually never occurs.

How can this lack of flexibility affect the health system's ability to fill gaps in the TB continuum of care and efficiently deliver TB or other health services?

Take the example of sputum/sample collection and transport from the TB continuum of care figure above. Sputum collection is critical and requires a variety of different ORT sub-line item inputs.³ If sputum collection cups can be procured under the supplies ORT sub-line item but the fuel ORT sub-line item has reached its ceiling then it's possible the TB output of collecting sputum from TB suspects and transporting to labs for microscopy cannot be accomplished without a budget or management adjustment to help ensure fuel is available for transport. In other words, realizing output-based planning and budgeting requires either output-based payment directly matching payment to priority outputs or enough management autonomy or flexibility to ensure that all budget or cost inputs required for an output are allocated and spent.

Arguably, management autonomy or flexibility to allocate resources is even more important in the health sector than other sectors. Health purchasing has to encompass a lot of unpredictability including unexpected public health crises and incentivizing preventive or PHC services in order to reduce more expensive hospitalizations. Inputs to production of products such as cars or even social sector services such as education tend to be more predictable even though they are subject to price increases. For example, it is known what mix of parts is required for an assembly line producing cars or that a 10 year old child should be in the 5th grade. However, the optimal proportion of TB or health services required at PHC or hospital level and the exact level of outpatient visits or hospital admissions each year is less predictable. Therefore output-based payment or at least management autonomy or flexibility to allocate resources or adjust budgets is key to TB or health management, obtaining efficiency gains and desired TB service delivery improvements.

How can DHO and health facility management autonomy and flexibility increases improve TB and other health services while also maintaining appropriate financial management including internal controls and ensuring shorter-term steps can become first steps on the road to longer-term public service and health reforms?

The ORT expenditure cap can be placed at the total ORT expenditure level or budget line item level rather than at the level of each ORT sub-line item. Specifically, changing the level of the OR expenditure cap would involve a separation of functions between MOH or health system including DHOs/health facility in-charge managers, and MOF/Treasury/IFMIS mechanisms, systems and processes. MOH or

³ PE or human resources is not discussed in shorter-term steps other than to note that a District Commissioner said that the district hires some community workers with local government revenue and details of the mechanism and process could be further assessed.

DHOs/health facility in-charge managers would manage expenditure controls related to adjusting budget across ORT sub-line items and MOF/Treasury/IFMIS would manage expenditure controls at budget line item level. IFMIS would no longer reject expenditures above the ORT sub-line item ceiling or cap. MOH or DHOs/health facility in-charge managers could approve budget adjustments across ORT sub-line items. Or as suggested to consultants DHOs/health facility in-charge managers would be required to inform rather than obtain approval for small budget adjustments across ORT sub-line items to enable efficiency increases and improvements in TB and health service delivery.

This would allow DHOs including health facility in-charge managers the autonomy or flexibility to adjust budget or reallocate across ORT sub-line items to adjust to unpredictable changes in environment that occur during the year. During the consultants' visits to a small sample of hospitals and health centers, the facility managers appeared capable and committed but also overwhelmed by patients overflowing the health facility (these apparently high visit or utilization rate could be a sign of good management as in most countries patients do not come to health centers that have no services or commodities for them). The health facility managers seemed to know exactly what they needed to improve services and also desired to establish better management systems and processes. In summary, DHOs, hospitals and health centers communicated their intent to improve health management, their capacity to do so and their desire to receive systems and tools to enable these management improvements.

Moving the ORT expenditure cap from sub-line item level to line-item level would not remove the need to do the best possible initial planning and budgeting process. It would not remove the need to tighten controls around the Public Financial Management Act and other financial management policies and procedures to ensure the rules are followed related to each type of expenditure, cash payment and other financial management policies and procedures.⁴⁵ Removing the ring-fencing of drugs or moving the ORT expenditure cap for drugs is not recommended at this time due to donor funding of drugs and complexities in drug procurement.⁶ So there would be two ORT expenditure caps, one for drugs and one for all other ORT sub-line items. In any type of public or private business environment, flexibility to manage is a valuable asset and an ORT line-item expenditure cap could result in improved health facility management, lowered mispostings and a better balance between good financial management and commitment to deliver health services often in life or death situations. Appropriate separation of functions, financial management, accounting systems and procedures, and internal controls would need to be aligned around the ORT budget line item to help ensure good management, appropriate expenditure control, and avoid developing debts or arrears in delivering TB and other health services.

The shorter-term step of moving the ORT expenditure cap from the sub-line item level to the line item level can also be a first step to the longer-term public service and health reforms as described in Section IV. An example of how moving the ORT expenditure cap can be an integral part of a longer-term step-by-step implementation process is that it will also help level the playing field between public health

⁴ Moving the level of ORT expenditure cap does not impact the need to improve internal controls on health expenditures, for example, on allowances as mentioned in presentation entitled "Detailed District Health Recurrent Expenditure Analysis From IFMIS" at SWAp Mid-Year Review Meeting.

⁵ More detailed analysis is needed but in general moving the level of ORT expenditure cap is not inconsistent with the findings of the "Study of Health Sector Efficiency in Malawi" and is intended to present a shorter term step to both move towards the six study recommendations and improving TB and other health services.

⁶ Given substantial country, USAID and other donor investment in drug supply chain management, drugs are not a major focus of this rapid assessment. However, as with the relationship between NTP and Global Fund consolidated budget and district level health budgets, it is likely there is substantial efficiencies, synergies and leveraging to obtain between drugs and other ORT health expenditures.



facilities and CHAM health facilities. Service level agreements transfer ORT funds to CHAM health facility bank account where the CHAM facility then budgets and manages the funds. Transferring health budget funds to health facility bank accounts is not recommended at this time but moving the ORT expenditure cap can be the first step in a longer-term health reform process gradually shifting to increased management autonomy and other changes in health sector institutional structure, roles and relationships. More broadly, an important aspect of these longer-term public service and health reforms may be the separation of finance and management and the relationship to decentralization (strengthening functional specification for health across levels could help clarify the picture). The level of ORT expenditure cap could be considered more management than finance-related and would enable further decentralization of management. Based on international experience, relatively greater centralization of finance is critical to risk pooling or financial risk protection against catastrophic illness which is an area where health varies substantially from other sectors. These issues will likely be considered in the longer-term public service and health reforms but it is worth noting that when TB and health financing is unpacked or flows all the way to the direct point of service delivery, the level of the ORT expenditure cap is an important factor that can reverberate to both improving service delivery and broader health reforms.

Recommendation #3: In health provider payment and funds flow, move the ORT expenditure cap from the sub-line item level to the line item level to increase health facility level ability to improve TB program management.

Possible Next Step #3: Engage in further policy dialogue and develop specific proposal on how to move ORT expenditure cap from the sub-line item level to the line item level.

2. Improve Health Resource Allocation

Resource allocation cuts across the health financing functions of pooling of funds and purchasing of health services. In general, formulas to allocate resources from national level to lower country administrative units including districts are inherent in the pooling function as they create health risk pools at the district level. Mechanisms to allocate funds from this risk pool to providers are inherent in the purchasing function as the purpose is to purchase service provision from health facilities.

MOH Health Economist informed consultants that a resource allocation formula is used to allocate health funds across districts and that it includes factors such as population and disease burden. In principle, the resource allocation formula is inherent in the health financing pooling of funds function as it determines the health pool of funds at the district level and is directly related to equity and financial risk protection for the population of Malawi including poor TB patients. In the context of decentralization, it can be helpful to track the resource allocation all the way through the process including split between national level and district level funding and split across districts. In this initial assessment, there is no evidence that TB is underprioritized or disadvantaged in this resource allocation process but it may be worth more in-depth analysis.

Resource allocation between DHO functions, inpatient services or hospitals, and outpatient services or health centers is inherent in the health purchasing function. It was not clear to consultants from stakeholder consultations whether this allocation is done based on a policy decision on the split between inpatient and outpatient services or based on input-based or historical or other budgeting process. The nature of this allocation between inpatient and outpatient may have particular relevance to TB services due to the recent decision not to hospitalize TB patients for initial treatment but rather to begin treating outpatient immediately. Reducing hospitalization should create system efficiencies or savings but TB services may not benefit from these savings if there is not a shift in resource allocation from inpatient to outpatient services. In other words, the money may not shift to the periphery of the

health system or follow the TB service priority of moving services closer to the patient and filling gaps in the TB continuum of care.

Recommendation #4: Continuous analysis and refinement of national to district level resource allocation formula to strengthen relationship between resource allocation and district population health service needs including for TB services, and begin to shift from input-based or historical budgeting to policy decisions in allocating district level resources across inpatient and outpatient services and health facilities.

Possible Next Step #4: analysis of resource allocation formula to assess whether it takes into account TB prevalence across districts and whether it can be improved, and in-depth analysis of how districts allocate resources across inpatient and outpatient services and health facilities and the impact on TB and other health services.

3. Leverage or Dovetail TB Financing and Other Health Financing

Malawi doesn't have the domestic or international donor revenues required to operate disease-specific vertical systems or programs for all priority diseases, conditions or services. Programs that do the best job in leveraging or dovetailing resources may be the programs that achieve the greatest success. This could be particularly true for TB where a small number of cases may influence the level of resources allocated (although consultants found no anecdotal evidence that TB is underprioritized and DHOs, hospitals and health centers all spoke strongly and well about their provision of TB services). Four areas where NTP and TB service providers could possibly further leverage resources are discussed below.

4.4 NTP Domestic Revenue and Global Fund Grants

Given substantial USAID and other donor investment in NTP program and Global Fund grants, district level budgeting, payment and funds flow mechanisms were the primary focus of this rapid assessment. However, stakeholder consultations revealed that further investment in coordinating the consolidated NTP domestic revenue and Global Fund grant budget could pay dividends in leveraging or dovetailing TB financing. As the MOH does not have a bank account and all domestic revenue expenditures are made by the Accountant General, it becomes more important to synchronize country and Global Fund financial management, procurement documentation and accounting systems and processes to ensure that country and Global Fund monies converge at the right time and right place to perform TB activities and produce TB outputs. The new Global Fund concept note and funding mechanism, one grant for TB and HIV, and other management structure and process changes could provide the opportunity to ensure optimal leveraging or dovetailing of NTP domestic revenue and Global Fund grants. In addition, results-based financing (RBF) or pay-for-performance (P4P) building on existing pilots could be considered under Global Fund grants to both incentivize filling gaps in the TB continuum of care and serve as a shorter-term step to the longer-term shift to output-based provider payment systems and public service and health reforms. Shifting the district level ORT expenditure cap to the budget line item level and RBF are both short-term steps in the gradual movement towards output-based provider payment systems.

4.5 TB and HIV

It is clear that country policy is rapidly shifting towards greater integration of TB and HIV services. Global Fund TB and HIV grants will be combined, NTP spoke strongly about its importance and their actions in this area, and districts/health facilities reported receiving this recommendation and spoke to their actions to implement this policy. Consultants' received reports that service delivery and clinical linkages are being strengthened to ensure that TB patients are screened for HIV and HIV patients are screened for TB. However, it also seemed clear that this strong policy recommendation is still filtering

down to the implementation or service delivery and management level and practical problems do arise. For example, while a health center accepted the recommendation to co-locate TB and HIV services, severe space problems and privacy concerns arose as they considered how to implement it. These same practical service delivery or management questions may also be creating issues in ensuring that all HIV patients are screened for TB.

4.6 District Health Expenditures

Exact details of the relationship between national level and district level budgeting, payment and funds flow needs to be further explored to identify ideas on how TB program and services can better leverage district health expenditures needs. Nevertheless, it is hypothesized that consolidated national NTP and Global Fund financing could better leverage district and health facility level financing. As shown in the TB continuum of care figure, maximizing NTP and Global Fund investments and activities may often depend on district and health facility level health expenditures (e.g. fuel, supplies). If sputum cups, transport to microscopy, other variable costs, trained staff, information systems and other key inputs do not all come together at the point of service, it will hamper TB case-finding and treatment. This issue relates not only to ORT budget line item but also PE and capital. Examples abound of how this leveraging or dovetailing can occur, for example, Riders for Health was mentioned by many stakeholders as helping to mitigate the severe transportation problems.

4.7 Private Providers

As the vast majority of TB services are financed by public funds and provided in public providers and TB is a disease with public health ramifications, public financing and service delivery is the focus of this rapid assessment. That said, private providers can play an important role in filling gaps in the TB continuum of care. CHAM service level agreements or contracting for health services in private providers using public funds present a significant opportunity to leverage or dovetail financing. NTP should coordinate with MOH and CHAM to help ensure inclusion of TB services in all CHAM service level agreements as well as continuous monitoring of the process. NTP staff noted that initially private providers played little or no role but through NTP engagement and USAID SHOPS Project support to private providers they are now providing limited but key services particularly sputum collection, at no charge to the patient.

Recommendation #5: Maximize leveraging or dovetailing of TB financing and other health financing including NTP domestic revenue and Global Fund grants, TB and HIV, district health expenditures, CHAM service level agreements, and for-profit private provider services.

Possible Next Step #5: Develop concrete strategies, plans and first steps to maximize leveraging or dovetailing of TB financing and other health financing including NTP domestic revenue and Global Fund grants, TB and HIV, district health expenditures, CHAM service level agreements, and for-profit private provider services.

5. RELATIONSHIP BETWEEN SHORTER-TERM TB PURCHASING AND PFM STEPS AND LONGER-TERM PUBLIC SERVICE AND HEALTH REFORMS

5.1 Envisioning Longer-Term Public Service and Health Reforms

As shown in the overall strategy and sequencing option figure in Section II, a direct linkage between the shorter-term steps and the longer-term public service and health reforms will likely contribute to optimizing the four health reforms, strategic health purchasing, obtaining efficiency gains and improving TB services. The large square in the middle of the right block containing pooling and purchasing functions and health sector institutional structure, roles and relationships is intended to represent elements common to all four reforms that international experience demonstrates could link or create synergies between them to increase the probability of success.

On health pooling and purchasing, internationally there is a wide spectrum with countries ranging from very fragmented pooling and purchasing driving escalation in health costs (e.g. United States, South Africa) to less fragmented pooling and purchasing containing health costs (e.g. UK, Canada). Kyrgyzstan represents an example of a low income country able to introduce health pooling and purchasing arrangements including social health insurance without fragmenting pooling and using output-based provider payment systems including personnel salaries to match payment to priority services and populations, obtain efficiency gains and inject desired financial incentives into the health system. In Africa, Ghana has done a good job of implementing the National Health Insurance Scheme (NHIS) with stable financing and gradual reductions in risk pooling fragmentation. However, issues have arisen related to fragmentation of MOH preventive services/vertical programs and NHIS benefit package (especially given declining donor funding) and use of fee-for-service or non-bundled output-based provider payment systems driving cost increases. It appears from national health financing strategy policy dialogue that Tanzania is moving towards avoiding this fragmentation through single national health insurance pooling most health funding including government health budget subsidies for the poor and unified health purchasing or output-based provider payment systems to contain costs, increase efficiency and improve services.

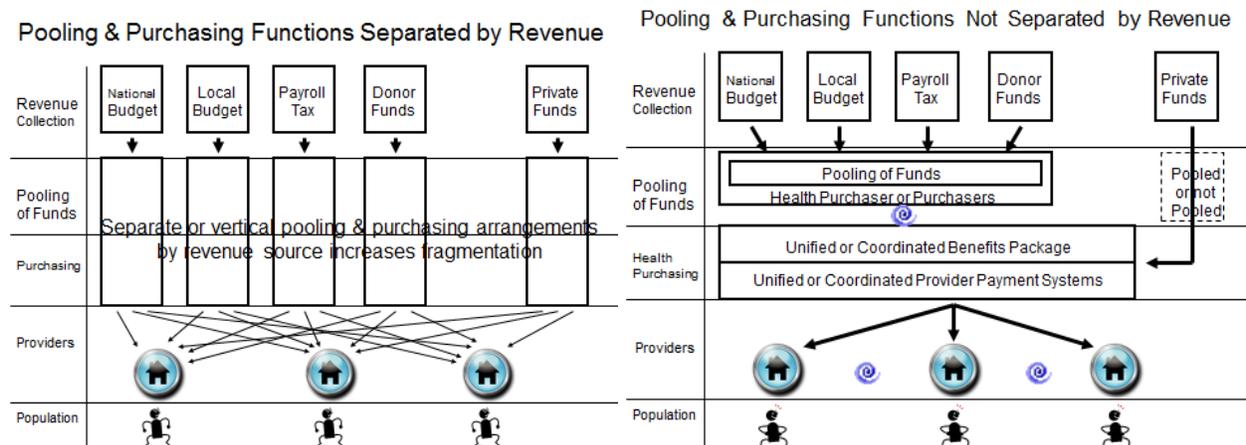
A choice Malawi may face in policy decisions on pooling and purchasing arrangements that impact all four planned public service and health reforms are portrayed in the figures below. The first two side-by-side figures below illustrate the impact of pooling and purchasing functions separated or not separated by revenue source. The common perception that each revenue source has to be stand-alone or requires its own separate pooling and purchasing arrangements (figure on the left) can lead to health financing fragmentation and inefficiencies including:

- Less than optimal pooling of funds
- Less than optimal health purchasing mechanisms (what to purchase or service/benefit package and how to purchase or provider payment systems)
- Conflicting financial incentives in provider payment systems and difficulty managing at provider level (the mess of arrows in payment to providers)
- Not leveling playing field across types of providers (public, CHAM, private)
- Not achieving service delivery improvement objectives including for TB services
- Harder for people to access covered and appropriate services

Unified pooling and purchasing arrangements for separate revenue sources (figure on the right) may have the following advantages:

- More rather than less pooling of funds
- Unified or coordinated benefits package
- Any private out-of-pocket payments (user fees, copayments, etc.) are less fragmented or directly linked to essential services or benefits package regulatory framework
- Unified or coordinated provider payment systems across revenue sources to enable efficiency gains
- Reduction in conflicting financial incentives at provider level and improvements in health facility level management (clear arrows to providers)
- Clear health purchaser institutional structure, roles and relationships including increasing provider autonomy
- Stimulate desired health system structure and service delivery improvements
- Easier for people to access covered and appropriate services

Figure 2: Pooling & Purchasing Functions

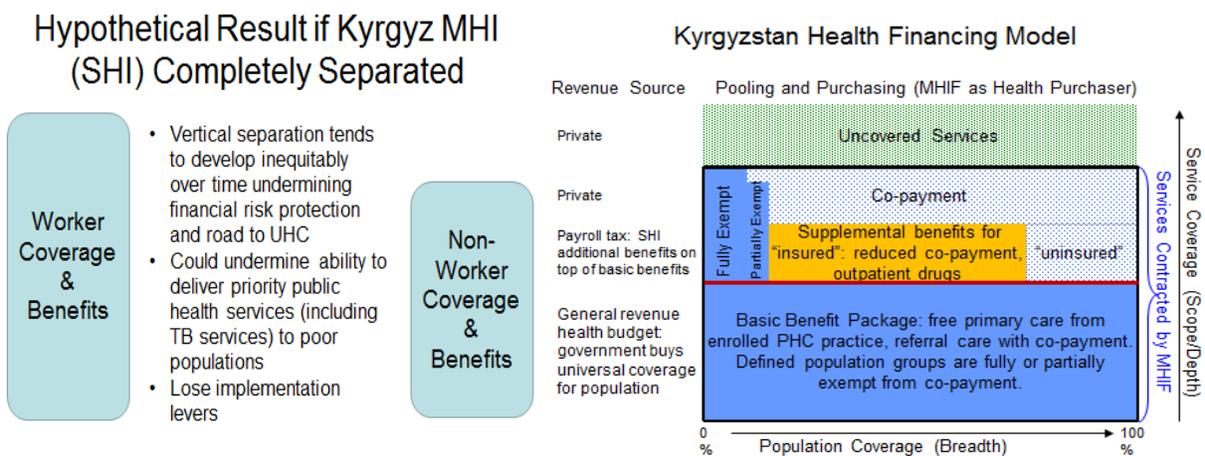


The second two side-by-side figures below portray hypothetical and current situation in Kyrgyzstan. The figure on the left is the hypothetical situation if Kyrgyzstan had completely separated implementation of social health insurance from the pooling and purchasing arrangements under general revenue health budget funding. Disadvantages of this implementation approach could have been undermining financial risk protection on the road to universal health coverage, undermining service delivery of priority public health services (including TB), and losing policy and implementation levers. The health financing model Kyrgyzstan implemented after the introduction of social health insurance is shown on the right. Unified pooling and purchasing arrangements exist for different revenue sources including use of the same output-based provider payment systems for both general revenue health budget and social health insurance payroll tax.

General revenue health budget including health worker salaries in dark blue funds a basic benefits package with free primary health care, part of the costs of referral care, and exemptions from population copayments for poor and vulnerable populations. Social health insurance payroll tax in orange funds reductions in population copayments and a supplemental benefit package of outpatient drugs. The Kyrgyz model includes population copayments in light blue but they consist of approximately 20 nationally established or regulated, prospective (amount people pay is known in advance), and bundled population copayments rather than provider established or unregulated, retrospective (amount people pay is not known in advance) and unbundled user fees. The regulated basic and supplemental benefit packages do not include some uncovered and unregulated services in green that are left to the market and private payment to cover.

In summary, the Kyrgyz health financing model is one comprehensive and integrated system or box that enables continuous efficiency increases and adjustments to coverage and services funded by different revenue sources as compared to multiple systems or boxes with a constant struggle to increase efficiency and improve relationships between the systems or boxes.

Figure 3: Kyrgyzstan Model



5.2 Step-by-Step Implementation or Sequencing to Move from Shorter-Term Steps to Longer-Term Public Service and Health Reforms While Protecting Priority Services Including TB and Poor Populations

5.2.1 Purchaser or Financing Side (Revenue Collection, Pooling and Purchasing)

Three of the envisioned public service or health reforms are primarily on the purchaser or financing side, introduce social health insurance, establish a “Health Fund” and new Memorandum of Understanding (or agreement or contracting) with CHAM. Based on international experience, Malawi probably has two main sequencing options to implement these reforms. First is some type of big bang or rapid implementation with introduction of social health insurance and establishment of a “Health Fund” to increase revenue and then try to reduce fragmentation and inefficiencies over time by unifying pooling and purchasing arrangements. The second option is implementation sequencing that moves step-by-step to avoid fragmentation by unifying pooling and purchasing arrangements for all types of revenue including general revenue health budget, payroll tax, sin taxes or other revenue in Health Fund, population out-of-pocket payments, and any other revenue.

The recommendation on moving ORT expenditure cap to budget line item level can represent a first step towards unified pooling and purchasing arrangements and help to ensure that introduction of SHI and establishment of a “Health Fund” do not fragment health financing or create efficiencies hampering extending coverage on the road to universal health coverage. Strengthening purchasing mechanisms or output-based service level agreements with CHAM can also be a step towards unified pooling and purchasing arrangements and leveling the playing field across type of providers if public providers are gradually shifted to output-based provider payment systems. A third first step towards unified pooling and purchasing arrangements involves avoiding the perception that RBF is a completely different species of payment system but rather is one example of output-based provider payment that can be combined or mixed with other payment systems to optimally incentivize health facilities and enable service delivery improvements. RBF implementation sequencing can be either: 1) placing it on top of other output-based provider payment systems (e.g. capitated rate, diagnosis-related groups) to “jolt” the system or enhance financial incentives; or 2) using RBF to show the way in developing the operating systems and PFM mechanisms required for output-based provider payment systems in general.

An exemplary broad implementation sequencing driving longer-term public service and health reforms could be: 1) shifting general revenue health budget ORT towards output-based provider payment learning from CHAM service level agreement experience; 2) add revenue sources, pool them, establish a health purchaser, and complete shift towards output-based provider payment systems for variable costs or direct costs of patient care; and 3) keep adding types of revenue and expenses into the unified pooling and purchasing arrangements over time (e.g. drugs, PE, capital) to complete the public service and health reforms of social health insurance, Health Fund and CHAM service level agreement using unified pooling and purchasing arrangements to increase efficiency, contain costs, and improve health service delivery.

It can be hypothesized that the step-by-step implementation sequencing option is better for TB services. Given public health concerns, TB services should be included in any publicly-funded essential services or benefit package. Therefore, unifying pooling and purchasing arrangements for all revenue and gradually

shifting to output-based provider payment better matching funding to priority services (including TB) and poor populations is more likely to avoid the risk of fragmenting financing of TB services and enable comprehensive and integrated service delivery improvement.

5.3 Provider or Management Side

The remaining or fourth envisioned public service or health reform of increase public provider autonomy is primarily on the provider or management side. It'll be beneficial to define what increasing public provider autonomy means early in the process. Does it mean central hospitals should be allowed to charge the population fees that they determine? Or does it mean that central hospitals have more autonomy to allocate their resources and determine the best mix of inputs to produce the desired services or outputs (e.g. move ORT expenditure cap to budget line item level, build on CHAM output-based service level agreements)? Should district hospitals be more autonomous? Should each health center be more autonomous or should health centers be organized into networks with a more autonomous lead health center? Clear and gradual implementation steps should be developed to increase public provider autonomy. Finally, increases in public provider autonomy should be considered in the context of changes in overall health sector institutional structure, roles and relationships (e.g. purchaser-provider split) as shown by the large square in the middle of the right block of the overall strategy and sequencing option figure above.

Recommendation #6: Development of implementation sequencing should be perceived as a critical aspect of public service and health reforms.

Possible Next Step #6: NTP program participate in longer-term public service and health reform dialogue to help ensure implementation sequencing (e.g. move ORT expenditure cap to budget line item level, build on CHAM output-based service level agreements, use RBF to lead the way to output-based provider payment systems) consistent with desired TB service delivery improvements and filling gaps in TB continuum of care.

In conclusion, identification, development and implementation of shorter-term steps to improve TB purchasing/provider payment and PFM can both improve health purchasing to fill gaps in the TB continuum of care and serve as first steps in implementation sequencing for the longer-term public service and health reforms by enabling better targeting of health budget funds to priority services and poor populations. Stated ambitiously or in the “big dream” sense, TB purchasing/provider payment and PFM improvements can be positioned at the intersection of moving towards universal coverage and increasing sustainability of vertical infectious disease programs given declining donor funding.

Annex I: Meetings Conducted

From May 18-29, 2015, the consultants met with national and international stakeholders, as listed below:

Table I: Stakeholders

<u>Name</u>	<u>Title</u>	<u>Organization</u>
Haldon Nijkho	Health Specialist	USAID/Malawi
Lilly Banda	Health Office Deputy Director	USAID/Malawi
Ritu Singh	HIV/AIDS Team Leader	USAID/Malawi
Abu	Supply Chain Management	USAID/Malawi
Owen	HIV Treatment	USAID/Malawi
Meral Karan	Director, D&G Office	USAID/Malawi
Amy Diallo	Health Systems Strengthening	USAID/Malawi
Martha Ngosi	TB Care II	URC (PIH?)
Limbikani Kanyenda	TB Care II Country Team Leader	URC
Takondwa Mwase	Chief of Party, SSDI-Systems Project	Abt Associates
Mark Malema	Health Financing Officer/SSDI-Systems Project	Abt Associates
James Mpunga	Director	National TB Program
Isaiah	Monitoring and Evaluation Director	National TB Program
Cornelius Kang'ombe	MDR Specialist	National TB Program
Francis Magombo	National Professional Officer-MPN	WHO
Ishmael Nyasulu	National Professional Officer- TB/HIV	WHO
John Chizonga	Health Economist	MOH Planning Department
Ruth Young	ODI Fellow	MOH
Poorna Mazumdar	ODI Fellow	MOH
Samuel Chembe	Deputy Secretary in the Commission	Government Health Service Commission (seconded to MOH Planning Department)
Melia Mganga-Nkhoma	Director of Finance	MOH
Loice Chikosi	"In Charge"/ Director	Area 25 Health Center (Lilongwe)

Mwawi Mwale	District Health Officer	DHO/ Bwaila District Hospital, Lilongwe
Henry	Accountant	DHO/ Bwaila District Hospital, Lilongwe
William	District TB Officer	DHO/Bwaila District Hospital, Lilongwe
Yamikani Chitete	District Commissioner	Mchinji District Commission
Patrick Nachipu	District Medical Officer	Mchinji District Health Office
Dominic Nkhoma	Planning Department Director	MOH
David Morton	Deputy Medical Director	Nkhoma Hospital (CHAM)
Robert Jones	Pharmacist	Nkhoma Hospital (CHAM)
Pius Nakoma	Global Fund Liaison	MOH
Ireen Namaknoma	Director	Reach Trust
Hastings Banda	Clinical Research Manager	Reach Trust
Mara Kumbwera Banda	Director	Paradiso TB Patient Trust
Ralf Radermacher	Team Leader, Social Protection Programme	GIZ
Timothy Kachule	Chief of Party	SHOPS/Abt Associates
Anne Conroy	Advisor	Ministry of Finance
Denizhan Duran	Program Manager, Health Financing	CHAI
Yizi Yang	Program Manager, HIV and TB	CHAI



**BOLD THINKERS DRIVING
REAL-WORLD IMPACT**