Impact on the country's HIV program.

Case Study
Improving efficiency and effectiveness of HIV spending through resource mapping in Malawi

OVERVIEW
Over the past decade, the global community has made significant strides in scaling up treatment for people living with HIV/AIDS. This success has been driven in part by an unprecedented increase in available financial resources, with annual domestic and international funding levels increasing from US$5 billion in 2003 to US$19.1 billion in 2013. However, in recent years, funding for HIV has leveled off. While governments are contributing more to the HIV response, external funding still accounts for 80-90 percent of resources for HIV in low- and middle-income countries and donors are facing significant constraints since the global financial crisis.1

Ministries of Health and Finance (MOH and MOF) often do not have information on the amount of future funding that will be available, or where investments by donors will occur. This limits their ability to efficiently manage the total amount of resources and fundraise for specific priorities, leading to wastage of resources, duplicative programming in some areas, and sudden gaps in funding in others. To address these limitations, CHAI has supported countries to conduct resource mapping. Resource mapping is a government-driven planning exercise that collects health-sector wide budget data from government units, donors, and implementing partners. Governments then use this data to identify funding gaps and spending inefficiencies.

Between 2010 and 2013, CHAI supported Rwanda, Ethiopia, Malawi, South Africa, Swaziland, Burundi, Lesotho, Liberia, Tanzania, and Zanzibar to introduce resource mapping. CHAI’s technical assistance has been supported by the U.K. Department for International Development (DFID), the Swedish International Development Cooperation Agency (Sida), the Norwegian Agency for Development Cooperation (Norad), the Bill and Melinda Gates Foundation (BMGF), and Irish Aid. This case study focuses on resource mapping in Malawi and its impact on the country’s HIV program.

THEORY OF CHANGE
Governments can create the fiscal space for universal access to HIV treatment and high impact prevention interventions by better targeting their own spending as well as that of partners and donors. To make informed budgeting decisions for a comprehensive HIV response, policymakers need increased visibility on planned investments and interventions.

IMPACT
In Malawi, annual resource mapping has generated evidence that informed the allocation of US$300 million to high-impact interventions, and strengthened national ownership and coordination of the HIV response. Success has catalyzed adoption of resource mapping in nine countries to date.

KEY PARTNERS
- DFID
- Sida and Norad

APPROACH
Malawi faces severe resource constraints and is largely dependent on external aid; 81 percent of the country’s total health expenditure and 99 percent of its HIV expenditure comes from donors. 2 The government remains committed to improving coordination and value for money1,3 in order to achieve the UNAIDS 90-90-90 targets by 2020.4

In 2011, during the development of Malawi’s application to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), it became clear that the government needed additional information on where investments were occurring, in order to facilitate coordinated budgeting and planning of the health programs. While

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1 Value for money is the optimal use of resources to maximize impact for each dollar spent to achieve intended outcomes.
2 UNAIDS 90-90-90: 90% of people living with HIV diagnosed, 90% of people diagnosed on ART, and 90% of those on ART virally suppressed.
Malawi had previously conducted resource tracking exercises on an ad-hoc basis, there was no systematic process in place that required stakeholders to routinely submit funding information.

Drawing on lessons learned from the first exercise in Rwanda, CHAI supported Malawi’s MOH to introduce resource mapping to answer the following questions:

- **How much** is being budgeted and spent?
- **Who** is investing in and implementing programs?
- **What** interventions are being funded, by activity (e.g., antiretroviral therapy or ART) and cost category (e.g., lab commodities)?
- **Where** is spending occurring, by geographic location, level of health system, and beneficiary group?

**First, CHAI supported the development of the resource mapping tool.** CHAI worked with the MOH to develop a tailored, Excel-based, dynamic data collection tool. The tool included a detailed geographic breakdown of data so that results could be used to better coordinate district programs. The MOH asked stakeholders to validate the tool to ensure buy-in.

**Second, CHAI assisted with data collection and analysis.** The resource mapping tool was completed by almost all development partners (290 partners, representing 119 funding sources). In parallel, CHAI supported a detailed cost analysis of sector-wide and disease-specific program plans. CHAI and the MOH then quantified resource gaps by comparing the data collected on resources available to the estimated cost of the health sector response. This could be used to inform prioritization or resource allocation to under-funded, high-impact interventions.

**Third, CHAI helped disseminate results and encourage stakeholders to use the results for planning.** The government shared results at the first Health Financing Summit, organized with CHAI’s support. This Summit has become an annual meeting where over 200 governmental and non-governmental representatives use resource mapping data to prioritize interventions and coordinate current and future investments and programs. This in turn reduces duplication and funding gaps.

**IMPACT**

The resource mapping process provided the MOH with its first complete view of donor funding. This process revealed that 30 percent more funding was available for health than the MOH had previously realized. Results illustrated the country’s dependence on donors in HIV and other disease programs, while highlighting government contributions towards the health system. Analyses of resource needs and availability also showed severe gaps in HIV response (estimated at US$115 million in 2015) by activity area and cost category (Figure I).

![Figure I. Resource Gap](image)

*Note: Assumptions made to remove indirect costs.*

*Source: Malawi Resource Mapping data, National HIV Strategic Plan*

The analysis of resource gaps enabled the government and development partners to better coordinate resource allocation, optimize service delivery, and mobilize new resources.

**Resource Allocation**

Analysis of resource gaps enabled the allocation of US$300 million to higher-impact, underfunded interventions. CHAI helped with the re-programming of existing funds and informed the development of budgets for new funds. For example, CHAI supported the National AIDS Commission (NAC) to develop a robust gap analysis and Excel-based tool to more transparently, efficiently, and regularly allocate their US$95 million budget. When the NAC projected US$15 million of this budget would not be spent, CHAI supported re-programming. For example, resources were shifted from male circumcision surgeries in five districts where an external donor was already paying for surgeries, to underfunded male circumcision activities, such as demand creation, across 18 districts.

Additionally, following the Health Financing Summit, the local DFID office requested that CHAI use the analyses that had been presented to inform the re-allocation of US$46 million in HIV funding to underfunded and higher-impact activities. This included US$9 million that was reallocated to critical gaps for prevention of mother to child transmission.

**Service Delivery Optimization**

Resource mapping and costing datasets have also enabled the government to identify systemic...
inefficiencies. For example, CHAI supported a working group to analyze the costs of Malawi’s fragmented supply chain, where each partner uses a parallel system. Results illustrated that harmonization of these systems could save over US$11 million per year. This informed DFID’s decision to donate drugs directly to the government’s supply chain agency, rather than distributing them through a third party contractor. The change contributed to an estimated reduction of US$3 million in supply chain costs between 2013 and 2014. CHAI continues to support the government with harmonization of parallel systems, while strengthening the capacity of the national central medical stores to manage more commodities.

Resource Mobilization
Given Malawi’s severe funding shortages, CHAI supported the MOH to improve efficiency of existing funding while also mobilizing new resources. Through a costing study of ART, CHAI identified poor coverage of cotrimoxazole, a critical prophylaxis for HIV patients. Further investigation of resource mapping and other available data indicated a shortage of funding for and stock-outs of essential medicines. As a result of these shortages, cotrimoxazole that was funded by HIV programs was being prioritized to treat non-HIV patients for other diseases. CHAI supported the MOH to quantify and present the resource gap for all essential medicines to the MOF. This compelling evidence informed the MOF’s decision to allocate US$8 million more to essential medicines.

Resource mapping data also helped the government secure US$115 million from GFATM for HIV commodities by illustrating that funding these commodities would achieve the greatest impact.

LIMITATIONS AND LESSONS LEARNED
Stakeholder participation has been essential to the success of resource mapping. To gain the necessary buy-in, the Government of Malawi consulted stakeholders early on and maintained this collaboration by transparently sharing the results. CHAI also worked at the global level to increase understanding of the goals of resource mapping and how it can be harmonized with other resource tracking processes.

To ensure that success is sustained, it is critical that governments entirely manage resource mapping, overcoming challenges, such as staff turnover. CHAI is supporting the Malawi MOH to increase ownership of resource mapping with each successive round and slowly phasing out involvement. In the fourth round, an MOH team is leading the entire process, calling on CHAI only as needed. To facilitate institutionalization within the MOH, CHAI simplified the tool and processes, reducing data collection time. CHAI also helped foster a culture of evidence-based decision making from the district to the central level. This was achieved through trainings on how to use data in fundraising, planning, and implementation. The MOH will continue such applications long after CHAI’s engagement in resource mapping.

FUTURE OUTLOOK
The demonstrated success in Malawi and other initial focus countries prompted additional countries to approach these MOHs and CHAI for support. Recently, the Zambian and Zimbabwean MOH visited Malawi’s MOH to better understand the impact of the exercise.

Resource mapping is equipping decision makers with the evidence to identify, quantify, and rectify inefficiencies, as well as develop more informed and persuasive funding requests. CHAI is encouraging the institutionalization of data collection processes within MOHs, and supporting partners and governments to utilize the resulting information. This work will enable countries to mitigate financial barriers to universal access to HIV treatment and prevention, as well as other lifesaving health services.

REFERENCES

About the Clinton Health Access Initiative, Inc.
The Clinton Health Access Initiative, Inc. (CHAI) is a global health organization committed to strengthening integrated health systems and expanding access to care and treatment in the developing world. CHAI’s solution-oriented approach focuses on improving market dynamics for medicines and diagnostics; lowering prices for treatment; accelerating access to lifesaving technologies; and helping governments build the capacity required for high-quality care and treatment programs. Though CHAI remains committed to its initial focus on HIV/AIDS, CHAI also has expanded its scope to work in the following program areas: HIV/AIDS and Tuberculosis (TB), Improving the Efficiency and Effectiveness of Healthcare Systems, Malaria, Human Resources for Health, Vaccines, and Maternal, Child, and Newborn Health. For more information, please visit: www.clintonhealthaccess.org

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