

## More health for the money: Perspectives on improving the efficiency of health spending in Africa

### Introduction

Over the last 20 years, there has been a strong improvement in health outcomes, especially in the case of common communicable, maternal and childhood diseases. At the same time, many countries have experienced an increase in non-communicable diseases and injuries. Developing flexible, adequately resourced health systems that can effectively address this double burden of disease is what defines the critical policy challenge in Africa. As African governments move towards expanding the coverage and quality of healthcare for their citizens, securing adequate financing will be one of the many challenges to be overcome. As noted in CABRI's (2016) health position paper, achieving greater value for money, finding alternative sources of financing, reprioritising existing resources, increasing domestic revenues, and improving aid modalities are among the necessary steps towards the goal of universal health coverage (UHC).

Building on previous work in health financing, CABRI, in partnership with PRICELESS SA,<sup>1</sup> the Global Fund and the Bill and Melinda Gates Foundation, convened a policy dialogue for budget and health policy officials from 11 African countries to discuss the drivers of technical inefficiency in

health spending, and to consider how they could achieve better health outcomes with limited resources. The event, held in Addis Ababa from 30 November to 2 December 2016, covered key inefficiencies in health spending, as well as approaches and tools with which to identify and address these inefficiencies. The policy dialogue also emphasised the importance of health and finance officials working together effectively to improve value for money in health services.

This briefing paper summarises the views and inputs made at the policy dialogue, drawing on the background papers and case studies.<sup>2</sup>

### Is health spending in Africa inefficient?

In its 2010 World Health Report, the World Health Organisation revealed that between 20 and 40 per cent of health spending is wasted globally through inefficiency, indicating substantial potential for savings. The report identifies ten major sources of inefficiency (see Table 1).

Although the WHO report was published in 2010, the discussions at the policy dialogue confirmed that these ten inefficiencies are still prevalent today. What remains unclear is the magnitude of these inefficiencies. By and large, African

1 Priority Cost Effective Lessons for System Strengthening South Africa, a core partner of the International Decision Support Initiative

2 These documents are available at <http://www.cabri-sbo.org/en/events/policy-dialogue-on-efficiency-in-health-spending>

**Table 1: Ten leading causes of health system inefficiency**

Category of inefficiency	Details
Medicines	Underuse of generics and higher than necessary prices for medicines Use of substandard and counterfeit medicines Inappropriate and ineffective use of medicines Overuse or oversupply of equipment, investigations and procedures
Human resources	Inappropriate or costly staff mix, unmotivated workers
Health services	Inappropriate hospital admissions and lengths of stay Inappropriate hospital size (low use of infrastructure) Medical errors and suboptimal quality of care
Health system leakages	Waste, corruption and fraud
Intervention mix	Inefficient mix or inappropriate level of strategies

Source: (WHO 2010)

countries do not routinely assess these inefficiencies and, therefore, are not in a position to say if, indeed, 20–40 per cent of health spending is lost due to inefficiency.

**‘Inappropriate uses of medicines is one of the major causes of inefficiencies. This happens, for example, when people use antibiotics to treat a cold.’**

*Tessa Edejer, WHO*

The first three categories of inefficiency (medicines, human resources and health services) were the focus of discussions at the policy dialogue. The first category, *medicines*, posed the greatest concern, because medicines often comprise the largest expenditure item in non-wage public health spending. None of the countries present consistently monitored the use of generics, which is important in reducing out-of-pocket expenditure. Monitoring of this indicator would add tremendous value, in addition to sensitising the public to the benefits associated with generic medicines and encouraging more doctors to prescribe generics.

**‘The country is so huge, which makes it difficult to control all centres importing drugs. Even though there is a central quality control institution in the centre, it is generally difficult to ensure the quality of drugs.’**

*Official from the DRC*

Nana Boateng, a programme manager at CABRI, noted that some countries in the Southern African Development Community pay up to 50 times more for certain medicines than do other countries in the same region for the same medicines. While economies of scale may be a factor (larger countries procuring more medicines and, therefore, receiving better prices), there is substantial room for countries to negotiate more advantageous prices. Amina Egal, Associate Health Specialist with the Global Fund, spoke about how the Global Fund is working to put in place mechanisms to assist in the negotiation of drug prices, and already has a mechanism for pooled procurement of medicines for 40 countries.<sup>3</sup>

The sources of inefficiency in *human resources* are well known to officials. For example, countries can immediately relate to problems such as inadequate staff, poor staff motivation and migration of health workers. However, these problems are difficult to address. Many or most of them are closely linked to lack of appropriate incentives. While

<sup>3</sup> It is worth noting that there is another platform, [wambo.org](http://wambo.org), an online e-marketplace for medicines and equipment, which aims to utilise economies of scale and expand access to all countries for pooled procurement as a global public good.

financial incentives can increase performance and retention, these are not affordable for all countries. Moreover, African countries face competition in the form of international salaries for doctors and nurses, and see state-trained doctors migrating abroad. With few options to address this problem, some countries like Mauritius train more doctors than are needed in the expectation that some will be lost to the diaspora.

*Health services* are also complex in terms of both assessing the inefficiencies and addressing them. As shown in Table 1, lengthy hospital stays, inappropriate hospital size (e.g. far more beds than patients) and passive purchasing (e.g. incremental line-item budgeting with no link to production of services) are some of the causes of wasteful spending. Health insurance schemes have also contributed to these problems. For example, doctors can elevate an outpatient to an inpatient visit because the insurance policy of the patient only covers hospital admission. So there are cases of patients being admitted to hospital for diarrhoea, for example. This adds to the overall costs and inefficiencies in the healthcare system.

**‘Hospitals receive block grants currently. The government is working to introduce capitation as a form of strategic purchasing through the national health insurance scheme.’**

*Official from Ghana*

The way in which hospitals are funded is also critical. Several countries are moving towards making more strategic purchasing decisions, which requires exercising informed and timely choices and putting in place credible procurement and supply chain management practices.

**‘In Mauritius, expired medicines were kept in storage for a significant period of time. This cost the government US\$25 million. An area of concern for government is the efficient disposal of expired drugs.’**

*Official from Mauritius*

There are factors that are not specifically related to the health sector, but nevertheless contribute substantially to making the services more efficient. In South Africa, for example, baby milk formula for the infants of HIV-positive mothers was kept in storage for 3 years due to a lack of distribution capacity. As a result, 136 100 kilograms of formula had to be destroyed at a cost of R2 million. As CABRI Executive Secretary Neil Cole explained, issues of corruption, procurement, capacity and others can and do affect the health system.

**Box 1: The role of data and information management systems**

Good information management systems in Tunisia have been instrumental in driving efficiency in the health sector. This experience was shared at the health dialogue. It was also recognised that while these systems have value, they need to be structured in a way that allows for meaningful analytics. Information systems require good data. In some cases, it may take two years just to set up unit costing in a facility. In reality, however, what is needed is real-time unit costing, and we are not there yet. It was also emphasised that officials at the district level also need to be able to use such information systems. Anthony Kinghorn of PRICELESS SA stressed that in the absence of these systems, countries can still collect and monitor information, for instance by simply speaking regularly with district managers who often have great insight into efficiency problems.

**How can governments better identify and address inefficiencies in health?**

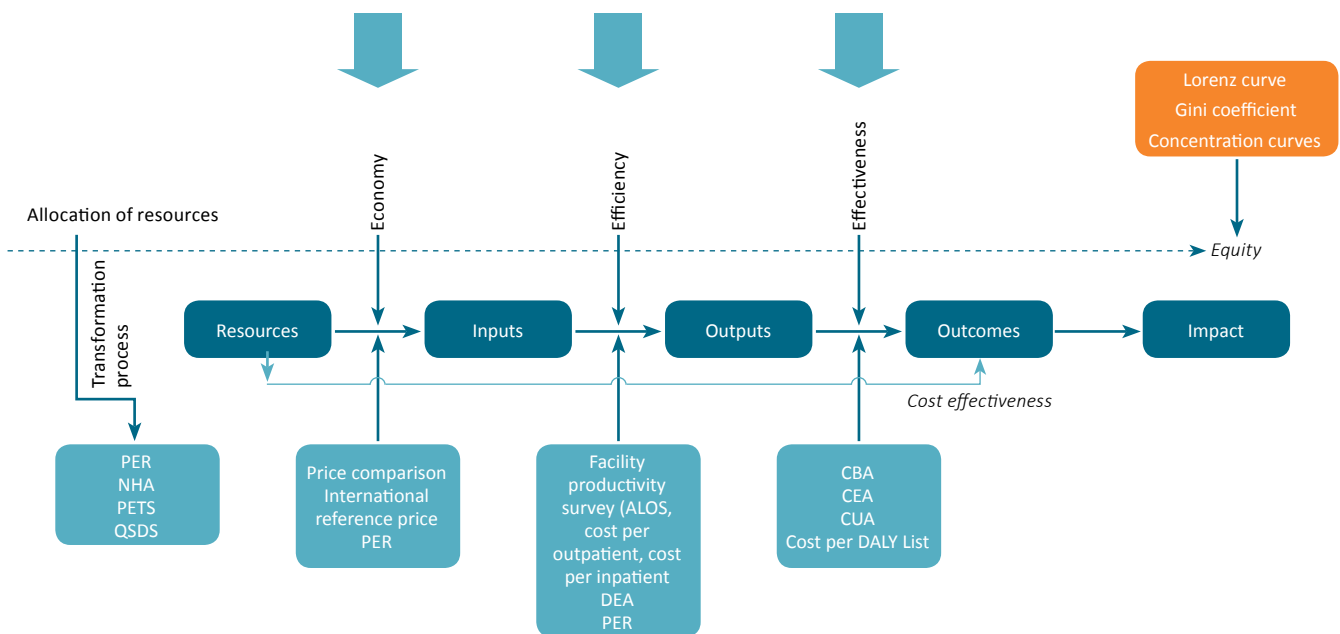
There are many tools available to assess and address inefficiencies in the health system. These were discussed at the policy dialogue. Data Envelopment Analysis is a linear programming tool that can assist in assessing which facilities in a particular country are relatively inefficient and in need of intervention. This tool has been applied in countries such as Ghana, South Africa and Kenya, where the number of inefficient health facilities ranged from 56 to 78 per cent. While it is a valuable and practical tool, it has limitations, such as not accounting for contextual factors that may contribute to lower efficiency scores.

At the policy dialogue, other frameworks were presented to the officials as ways in which governments can

systematically address value-for-money issues in health spending. One such framework encourages government officials to assess economy, efficiency, effectiveness and equity throughout the process of transforming inputs into results (see Figure 1).

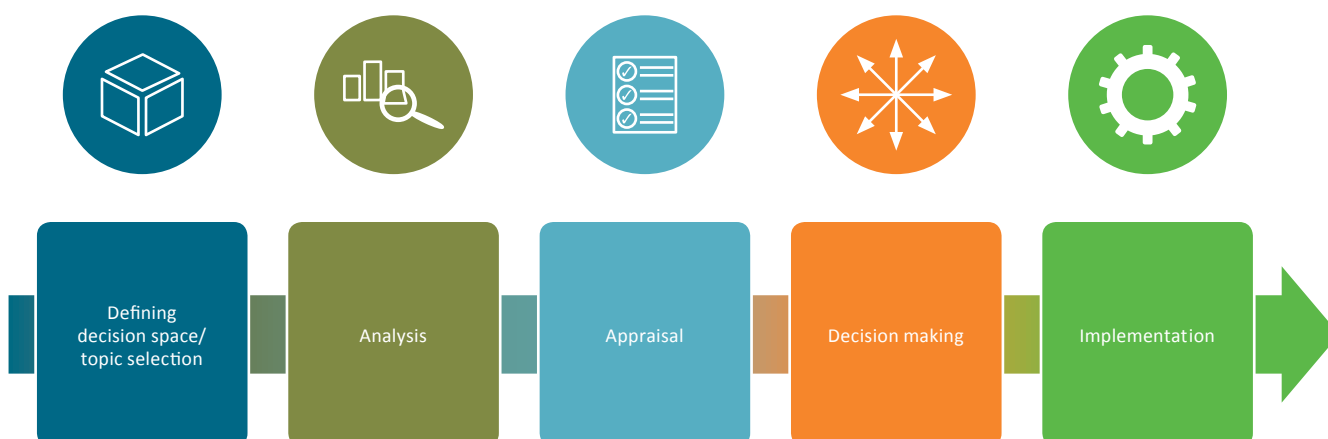
The framework suggests that value for money can be assessed at every stage of the transformation process. When resources are converted to inputs, such as in the case of purchasing generic medicines, the assessment should determine if the purchasing is economical. It is worth noting that while unit costs are a primary consideration, other factors, such as quality, need to be taken into account in making decisions concerning economy. When inputs are converted to outputs, such as the number of vaccinations carried out by health workers, officials should ensure that various options have been considered and choices have been made to ensure that no other combination of inputs

**Figure 1: Transforming inputs into results**



Note: PER = public expenditure reviews; NHA = national health accounts; PETS = public expenditure tracking survey; QSDS = quantity service delivery survey; ALOS = average length of stay (in hospital); DEA = data-envelopment analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; CUA = cost utility analysis; DALY = Disability adjusted life years; List = lives saved tool.

Figure 2: The HTA process



would yield a better health outcome, which is a measure of efficiency. The effectiveness of the health system – the extent to which outputs are converted into health outcomes, such as lower child mortality – should also be assessed to ensure that investments are yielding the desired results. At every stage of the transformation process, consideration should be given to ensuring that services have been delivered equitably and in an ethical manner.

**‘Systemically identifying and addressing efficiency issues is a government priority. The priority areas are human resources, procurement and drugs purchasing. The country is also moving towards local manufacturing of drugs and output-based budgeting.’**

*Official from Ethiopia*

A health technology assessment (HTA) is another important tool to inform decision makers about efficiency and other objectives in health spending. An HTA is a systematic assessment of any intervention to promote health or prevent, diagnose or treat a disease. It is, therefore, instrumental in priority setting. The process is illustrated in Figure 2.

**‘Routine assessments of pharmaceuticals to ensure an adequate stock of drugs, among other assessments, are undertaken.’**

*Official from Ethiopia*

**‘Distance assessments (i.e. between facilities and citizens) are undertaken. This has helped us to address shortages of radiologists in the country.’**

*Official from Tunisia*

**‘The government undertook a survey to measure the availability of services.’**

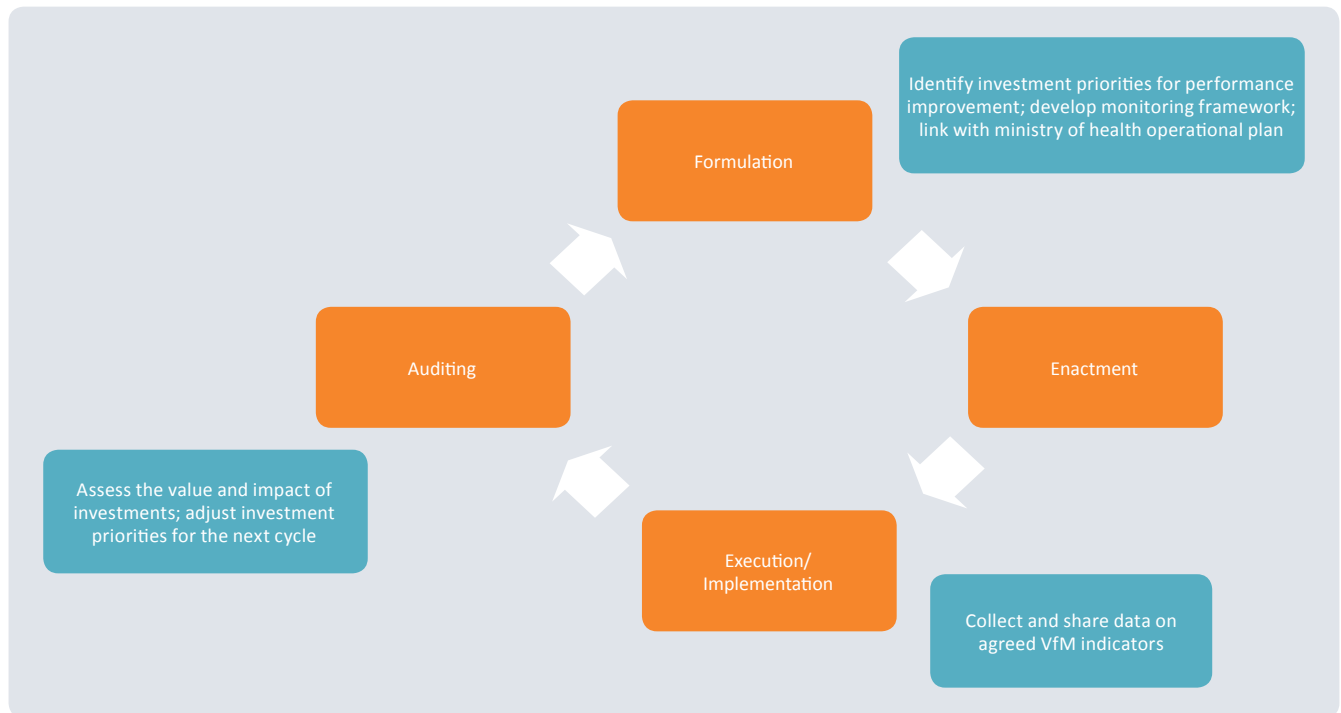
*Official from Benin*

The HTA process, presented by Thomas Wilkinson of PRICELESS SA, starts with defining a decision space. Defining the decision space means to clearly establish what is the nature of the decision to be assessed. For example, when assessing a new drug to treat cancer, defining the decision space would answer questions such as whether the indication for the new treatment would mean it replaces existing treatments or is added to existing regimens, or whether the government is considering funding a proportion or the total cost of the drug. A technical analysis then has to be conducted to assess value for money, typically using cost-effectiveness analysis and budget-impact analysis. An appraisal of the analysis is necessary to confirm whether the correct considerations informed it. This then aids the decision-making process and the implementation of the decision reached. While the UK, for example, is quite advanced and uses a sophisticated HTA, many other countries undertake at least some form of HTA and can work towards improving what is already in place. The 2014 World Health Assembly Resolution 67.23 highlighted the need for all countries, of all income statuses, to strengthen their HTA systems as a vital component of sustainable and functioning UHC. PRICELESS SA is a core partner in the International Decision Support Initiative (IDSI), which is actively working with countries in Africa and elsewhere to strengthen HTA and priority setting.

**What is the role of finance ministries and how can they collaborate better with health ministries to improve value for money in health spending?**

Ministries of finance and health have overlapping and differential roles in health planning, budgeting and spending.

**Figure 3: Integrating value-for-money considerations in the budget process**



Finance ministries are tasked with pursuing fiscal discipline, and allocative and technical efficiency, and ensuring that the necessary trade-offs between equally important priorities are made. Health ministries have to demonstrate that policies, plans and expenditures are achieving the intended health outcomes.

At the policy dialogue, finance ministry officials voiced their concern about donor co-ordination and how this significantly affects their roles. Unpredictability of funds, lack of transparency, duplication of investments and bypassing the treasury in disbursing funds are some of the problems stemming from donor behaviour that can adversely impact managing resources for health. A commitment by donors to align with country priorities and improve co-ordination would enhance the position of the ministry of finance to execute its role.

The budget cycle provides an ideal platform for officials from both finance and health to work together to improve health efficiency and effectiveness over and beyond their usual engagements. There are opportunities at all stages of the cycle to carefully consider the value-for-money implications of a policy decision. Figure 3 illustrates some points where officials can jointly identify priorities and value-for-money indicators at the formulation stage; collect and assess value-for-money data during budget execution; and include those findings in the reporting stage. These findings would also inform the planning phase of the subsequent budget cycle.

## Conclusion

Efficiency in health spending is increasingly becoming a priority for African countries as they seek to achieve UHC. Tackling inefficiencies must begin with identifying the sources of these inefficiencies. The policy dialogue showed that there are low-hanging fruits such as monitoring international drug prices and the use of generic medicines. There are other inefficiencies that are more complex, for instance the human resources and funding models, which require a medium-to long-term approach. There are also inefficiencies that are not health-specific (e.g. governance and logistics), but which fundamentally affect the health system. An important conclusion from the policy dialogue is that health and finance officials need to work together more effectively to deliver health services.

CABRI and PRICELESS SA will continue to work with countries to foster a closer collaboration and to assist countries in identifying and addressing inefficiency problems in the health sector. Future work may focus on priority setting and a deeper understanding of HTA.

## References

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