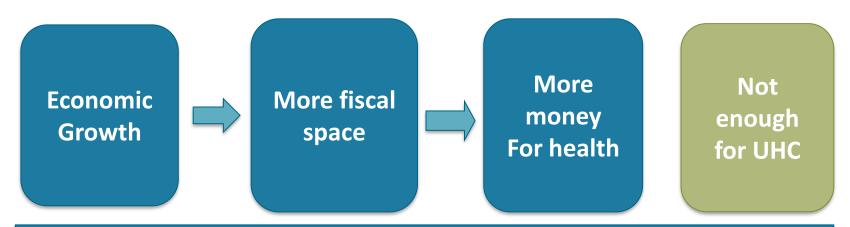
The budget cycle and frameworks to analyse inefficiency Dr. Nana Boateng



## The policy question



#### Efficiency in spending (value for money) is the key issue

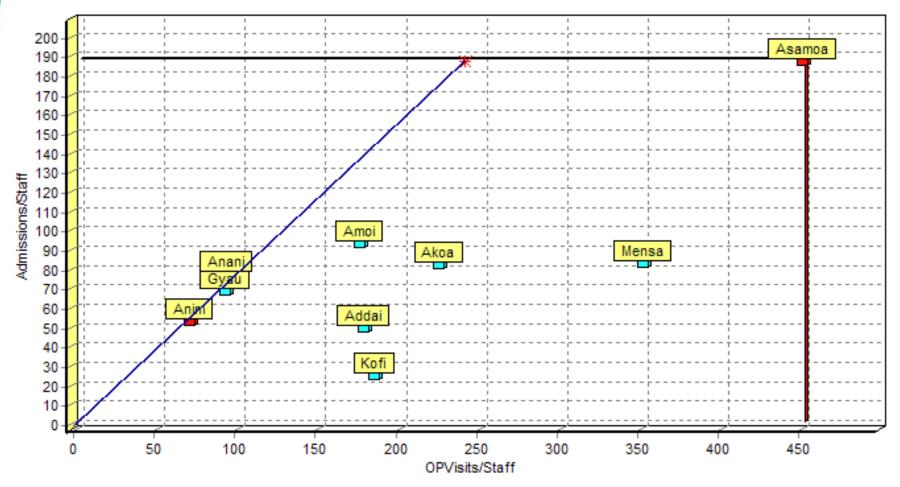
Despite widespread implementation of health systems reform in Africa, success (especially if measured as sustained improvement in service delivery and social outcomes) seems to have been limited. What are the blockages?

The policy question: How can health systems be made more efficient? And how can ministries of Finance and Health work together to make this happen?

# Key sources of inefficiencies in health (WHO WHR 2010)

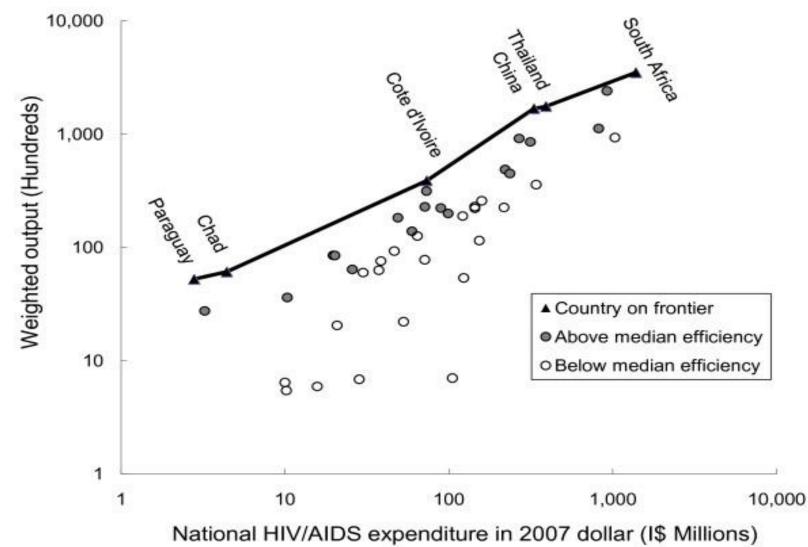
Category of inefficiency	Details				
Medicines	Underuse of generics and higher than necessary prices for medicines				
	Use of substandard and counterfeit medicines				
	Inappropriate and ineffective use				
	Overuse or supply of equipment, investigations and procedures				
Human resources	Inappropriate or costly staff mix, unmotivated workers				
Health services	Inappropriate hospital admissions and length 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/ inappropriate level of strategies				

## **Measuring efficiency: DEA approach**



... 78% of district hospitals [in Ghana] were technically inefficient". They could lower their cost by 48% and still achieve their current levels of output (Akazili et al, 2008); 56% of health centres in Kenya (2004); 70% of PHC clinics in KZN, South Africa (2001).

## Technical efficiency: AIDS spending (Zeng et al, 2012)



# Technical efficiency: AIDS spending (Zeng et al, 2012)

	Low HIV Burden (25 countries)	High HIV Burden (20countries)		
Service scale-up mechanism	Type of HIV/AIDS epidemic			
Above median efficiency (22 countries)	Brazil, China, Jamaica, Mali, <mark>Mauritius</mark> , Paraguay, Peru, Thailand, Uruguay	Botswana, Cameroon, Chad, Congo Dem. Rep., <b>Cote d'Ivoire</b> , Lesotho, Mozambique, Rwanda, <b>South Africa</b> , Swaziland, Togo, Uganda, Zambia		
Below median efficiency (23 countries)	Argentina, Belize, Cambodia, Colombia, El Salvador, Guatemala, Honduras, Indonesia, Iran, Lao RDR, Latvia, Nepal, <b>Niger</b> , Romania, Senegal, Vietnam	Angola, <mark>Benin</mark> , Burkina Faso, Central African Republic, Eritrea, Haiti, <mark>Tanzania</mark>		

"there may be substantial room for improving HIV/AIDS services at the country level with the existing resources ... where the efficiency of HIV/AIDS services is low, priority should be given to interventions to overcome barriers ... where performance is already high, efforts should be geared towards mobilizing more resources"

## Strengths and weaknesses of DEA

#### Strengths

It can handle multiple input and multiple output models/scenarios

Inputs and outputs can be very different units

It does not require information on prices of inputs and outputs

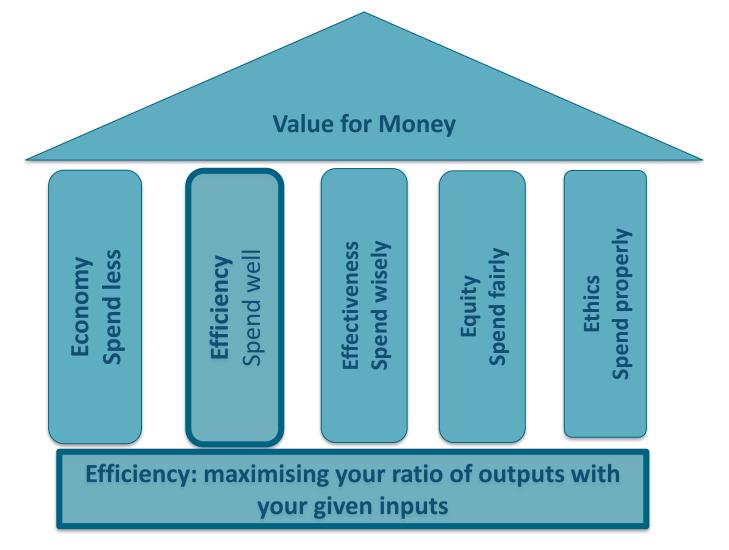
#### Weakness

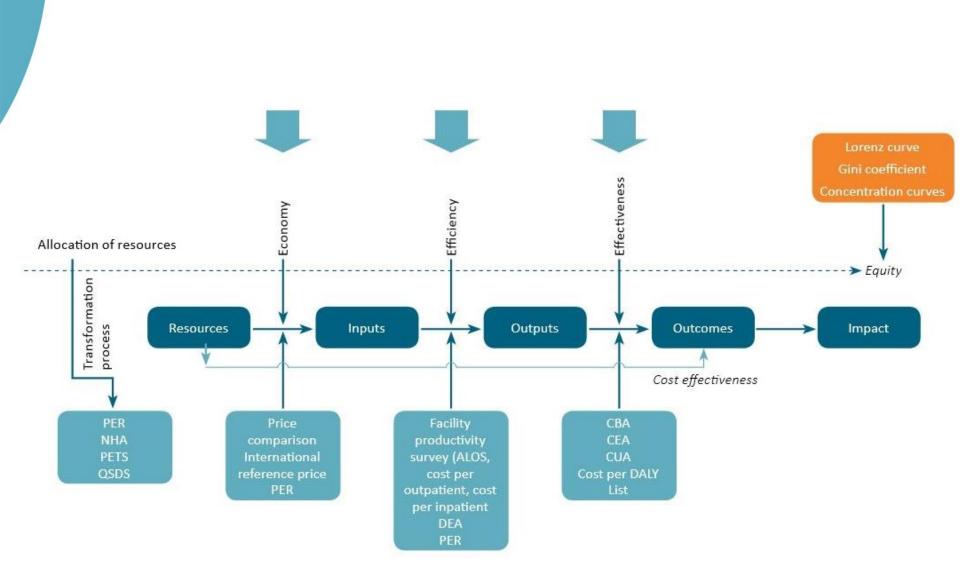
It attributes any deviation from the "best practice frontier" to inefficiency.

It will not take into account contextual factors e.g. epidemics, political constraints...

Data availability

# Measuring efficiency within the VFM framework





### **Measuring efficiency: VFM framework**

# Measuring efficiency: Health system building blocks

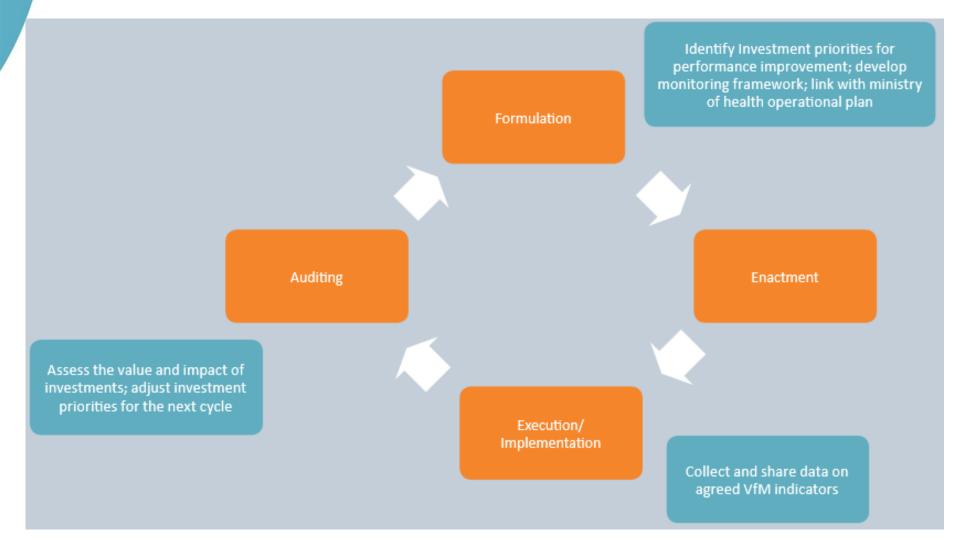
VFM value chain segment	Indicator	Source of information/tool	Health system pillar Medical products, vaccines and technologies	
Economy	International drug and medical supplies price benchmarking	International drug and medical commodities price reference lists National drug and medical commodities price reference lists		
Efficiency	Average number of medicines prescribed per encounter Percentage of medicines prescribed by a generic name Percentage of medicines prescribed from essential medicines list	Facility survey	Medical products, vaccines and technologies	
	<ul> <li>Facility productivity</li> <li>Average length of stay</li> <li>Cost per OPD/Cost per IPD</li> <li>Cost per adjusted bed-day</li> <li>Bed occupancy</li> <li>Outpatient visits per staff</li> </ul>	For activity data: Routine information sources/HMIS, Facility survey For costing data: PER, NHA, ministry of finance or health expenditure data	Health financing and social protection Service delivery	
	Number of out-patient visits per 10 000 population per year Number of in-patient beds per 10 000 population	Routine information/HMIS	Service delivery	
Effectiveness and cost- effectiveness	Cost per DALY for different conditions/interventions within basic benefit packages/health entitlements Cost per live saved	Tailored studies using national and international data LiST	Leadership and governance	

### Adapting the PEFA framework

C(ii) Pred	lictability & Control in Budget Execution 👘				
SI-13	Transparency of obligations and liabilities for health care user charges	<b></b> D+			
SI-16	Predictability in availability of funds for commitment of health expenditures		🛁 C+		
SI-18	Effectiveness of payroll controls in the health sector	<u></u>		) B	
S⊦19a)	Quality assurance processes in Procurement of Pharmaceuticals		<u></u>	, B	
SI- 19b)	Price competitiveness in Procurement of Pharmaceuticals	1			<b>a</b> A
SI- 19c)	Timeliness of Health sector Procurement processes	🛏 D			
SI- 19d)	Competitiveness & Transparency in Health sector Procurement		C 📕		
SI- 19e)	Inventory management in the Health sector	<b></b> D			
SI-20	Effectiveness of internal controls for non-salary expenditure in the Health sector	<b></b> ₽+			
SI-21	Effectiveness of Internal Audit in the Health sector	<b></b> P+			

From: Lawson et al. (2009) adaptation of PEFA criteria for Mozambique health

# Collaborative approach to making health systems more efficient: the budget cycle



### Recap

- There are various frameworks available to assess technical efficiency
- Data Envelopment Analysis (DEA)
- Mapping indicators against VFM and health systems
- Value for Money/Value Chain Framework
- Adaption of PEFA Framework
- Maximising entry points in the budget cycle

### Discussion

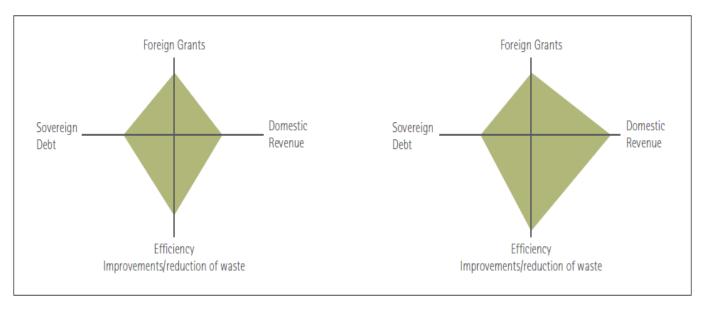
- Are the frameworks useful in practice?
- Do we need to do things differently going forward? How?

# A case study of fiscal space analysis in the HIV/AIDS sector in Burkina Faso

- Context
  - HIV sector funding is highly donor dependant
  - Budget allocation to HIV is below reasonable expectation
  - HIV donor spending is expected to plateau or decrease
  - HIV sector plan requires increased resources
  - General sense of waste in HIV sector, and overall lack of focus on efficiency
- Policy question
  - How will Burkina Faso finance it's HIV response long term? Where will the money come from?

# A case study of fiscal space analysis in the HIV/AIDS sector in Burkina Faso

- Approach
  - Fiscal space study with gap analysis



- Identify potential of different funding sources including technical efficiency
- Ministry of Finance and Health agree on a sustainable strategy to finance HIV response

## **Group work**

1. Read the case study

2. Break into 4 groups to formulate your positions in preparation for the role play

- **Group 1**: The Ministry of Finance in Burkina Faso should increase investments in HIV/AIDS
- Group 2: The Ministry of Finance in Burkina Faso should NOT increase investments in HIV/AIDS
- **Group 3**: The ministry of finance and the ministry of health should work together to plug the HIV funding gap by increasing technical efficiency savings
- **Group 4**: It is not possible to plug the HIV funding gap by increasing the efficiency of the HIV response, as in reality monetary savings are elusive, and do not generate programmatic funding for the HIV response. Instead, the focus should be on other solutions focussing on additional financial resources for HIV such as increased public spending and hypothecated taxes
- 3. Present positions in plenary
- 4. Vote on who won the debate

#### Thank you



CONNECT • SHARE • REFORM