## "PRIORITIES OF HEALTH ECONOMICS IN AFRICA"

Inaugural Conference of the African Health Economics and Policy Association (AfHEA)
10th – 12th March 2009 - Accra, Ghana

# Parallel session 4: Financing and reporting health research results

## PS 04/7
### Commodity forecasting for the scaling up of the ART for the treatment of HIV/AIDS in both public and private sectors in Kenya

*Korir, J and Kioko, U.*

**Background**

Successful implementation and expansion of antiretroviral therapy (ART) services depends on the continuous availability of high-quality antiretroviral (ARV) drugs and on the supply of a wide range of HIV/AIDS-related commodities. The government of Kenya has demonstrated high level political commitment in the fight against HIV/AIDS epidemic. One of the major constraints in the scale up ART is the inability of the national programmes to ensure commodity security. The main objective of the study was to quantify ARV commodities in order to deliver effective ART so as to increase quality of life and survival by eligible individuals.

**Methods**

The process of quantification involved four steps: forecasting demand for ARTs in Kenya, estimating requirements, and calculating the costs for procuring the ART requirements and estimation of available financial resources to identify the financing gap. The number of patients requiring ARV drugs in the different commodities was estimated based on service utilisation data from Logistics management Information System (LMIS) at Kenya National Medical Supplies Agency (KEMSA), service utilisation from PEPFAR and MSF. The Cape Town Antiretroviral Costing Model was used to estimate the number of patients in the first and second line treatment. The model estimates the number of patients who will be in the first and second line treatment, through series of assumptions about survival of the patients, patients lost to follow up and failure rates of the treatment. The national standard treatment protocol and testing guidelines informed the quantification process.

Results: The estimated cost of ARV drugs for adults' patients and associated supply chain was US $ 106.9 million, US $ 148.5 million, and US $ 185.9 million for 2007/08, 2008/09 and 2009/10 respectively. The cost of ARV drugs for children was US $ 6.63 million, US $ 8.82 million and US $ 10.85 million whilst the cost of the CD 4 reagents and the associated supply chain was US $ 45.49 million, US $ 50.12 million and US $ 51.59 million during 2007/08, 2008/09 and 2009/10 period respectively. The overall

financing gap was estimated at $74.2 m, $115.58 m and $ 285.55m in 2007/08, 2008/09 and 2009/10 respectively.


**Conclusions**
The results of the forecasting will enable the government and development partners to calculate specific ART order quantities and to plan shipment schedules for short-term procurement planning, to assist in medium- to long-term program planning and mobilise financial resources for ART commodities.