DRAGON’S DEN KENYA CASE STUDY: Is there a private sector role in to strengthen malaria prevention and treatment?

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BACKGROUND
Kenya is a country of over 40 million inhabitants in eastern Africa and is one of Africa’s fastest growing economies. GDP growth rate has fluctuated between 5.1% in 2004 and 4.6% in 2012 (WB Statistics). The government has invested significantly in infrastructure, internet band width and has a strong private sector growth strategy outlined in Vision 2030. There is also considerable private sector innovation in the financial sector with the development of mobile money technologies (MPESA) that are facilitating small cash transfers for a variety of small businesses in the country. Corruption continues to be a significant problem throughout the government, including the health sector. In 2012, Kenya ranked 139 out of 176 countries rated by Transparency International.

Despite the steady economic growth, wealth is unevenly distributed in Kenya (Gini Index = 47, 2005). In 2013, the National Average Household Expenditure per Adult Equivalent was estimated to be Ksh3,440 per month: it is Ksh2,270 in rural households compared to Ksh6,010 in urban ones. Although low, incomes in Kenya have experienced steady growth the last decade, fuelling greater demand for and expenditures in health.

Peaceful elections took place and a new constitution was signed which created 47 countries as the primary administrative unit of government, replacing 8 provinces. A process of decentralization of many government functions has begun, including many previously performed by the central Ministry of Health such as procurement of medicines and hiring of health workers.

MALARIA IN KENYA
Malaria is a serious public health problem in many parts of the country: 67% of the 43 million population (2012) are at risk. However, risk and intensity of malaria transmission vary significantly within the country which is divided into the following five epidemiological zones:

- **Lake Victoria endemic**: high levels of transmission all year round; 21% of population
- **Coast endemic**: moderate to high transmission all year, 8% of population
- **Highland epidemic**: low and unstable transmission with danger of epidemics, 18% of population
- **Semi-arid seasonal**: low transmission only during and after rainy season, 20% of population
- **Low risk**: transmission negligible or absent due to high altitude, 33% of population

Kenya’s National Malaria Strategy (NMS) covering the period 2009–2017 was developed in line with the Government’s first Medium-Term Plan of Kenya Vision 2030 and the Millennium Development Goals, as well as Roll Back Malaria partnership goals and targets for malaria control. The strategy is based on two main pillars:
• **Vector control**: mainly based on long-lasting insecticidal nets (LLIN). Target is universal coverage of the entire population for transmission reduction in the endemic zones (Coast and Lake) as well as the Highland zone and only personal protection of high risk groups in the semi-arid zone. Indoor Residual Spraying (IRS) is added in the Highland zones and neighbouring districts of the Lake zone. In the low risk zone only environmental management is envisaged.

• **Case Management**: Recommended first line treatment for uncomplicated malaria (*P. falciparum*) is the Artemisinin-based Combination Therapy (ACT) Artemether-Lumefantrine and monotherapies, especially with Artemisinin derivatives are banned. Presumptive (clinical) diagnosis is no longer recommended and instead all suspected cases are to be parasitologically confirmed either with microscopy or a Rapid Diagnostic Test (RDT).

**SITUATIONAL ANALYSIS**

Data from the Malaria Indicator Survey (MIS) 2010 in conjunction with other sources provides the following picture of the status of these key intervention strategies.

**Transmission reduction with Insecticide Treated Nets (ITN):**

- Kenya uses a mixed-model approach to ITN distribution, i.e. uses many different channels that include free public distributions through campaigns and health facilities (Ante-natal care), subsidised ITN through social marketing and at cost ITN through the commercial sector.
- Since 2001, DFID and USAID have supported PSI-Kenya in social marketing of bundled ITN (untreated nets with an insecticide treatment kit) and Behaviour Change Communication (BCC). By 2010, over 17 million ITN and 7 million treatment kits were sold.
- Free mass distributions of LLIN to children under five were carried out in the endemic zones in 2006 (3.4 million) while 5.4 million were distributed through routine health services 2008-10. Another mass campaign was planned for 2012 covering all households in the endemic and epidemic zones.
- In 2010, approximately 80% of nets owned by households were ITN and about 90% of ITN were LLIN.
- ITN ownership had not increased since 2007 and was 48% overall but around 60% in the endemic zones (Coast and Lake). Only about one fourth of households had more than one ITN. Ownership coverage was reasonably equitable between poorest and richest income quintiles.
- Population access to an ITN within the household (based on an average of two users per net) was 39% compared to a use rate of 32% suggesting that 83% of those with access to an ITN also used it. The MIS data suggests that use relative to access was better in the poorer wealth quintiles (>90%) compared to the richest (75%).
- The proportion of children (42%) and pregnant women (41%) was higher than the general population showing preferential net use by these groups.

**Diagnosis and treatment of cases:**

- Availability of the first-line treatment (AL) or any other ACT has been poor initially but has experienced modest increase in the public sector. However, supply through the private sector supply (which comprises about half of all health facilities in Kenya) has remained stagnant.
- Diagnostic capacity remains low, especially in private facilities. The poor rely on private pharmacists to diagnose a fever; in many cases, particularly in the Coastal region, many private pharmacists diagnose all fevers as malaria.
- In 2010 only 11% of all febrile children received any diagnostic test with most diagnostic tests occurring among febrile children of families in wealthier income quintiles.
• Of the febrile children who received any antimalarial (35%) about half (51%) received an ACT while the other received non-recommended monotherapy.

• Of the febrile children, about two thirds (65%) were treated in public facilities, 27% in faith-based facilities and private pharmacies, and 9% obtained treatment from drug shops. Consumer research reveals that poorest income consumers prefer treatment by a drug seller for convenience and cost. Although consumers are aware of the risk of counterfeit drugs, they still go to drug sellers because of the more affordable cost of drugs.

• In 2010 Kenya joined the pilot phase of the Affordable Medicine Facility for malaria (AMFm) which provides subsidized (at manufacturer’s level) ACT particularly for the private sector. This has increased ACT availability in public facilities from 88% to 97% and in the private outlets from 21% to 60%.

Other Factors:

• KEMSA has undergone significant restructuring and has improved many of its business processes, achieving ISO certification in some areas. However, it has traditionally under invested in logistical capacity and even with the reforms, it is not clear that the logistical capacity will be up to the task of serving all counties in the decentralized system. It has adopted a policy of contracting out to private commercial firms for some of its logistical needs, but some of the commercial firms are reluctant to expand capacity to serve KEMSA until its reliability to pay bills on time is proven. KEMSA itself is facing issues receiving timely payments for medicines from the 47 counties which now have spending authority but may not all have the capacity to manage funds and pay bills in a timely manner.

• The National Health Insurance Fund (NHIF) continues to expand coverage and provides benefits for malaria drugs, but not malaria nets. Currently, the fund has 3.3m subscribers, but since most of these subscribers are employed in the formal sector, the NHIF is currently doing little to help the poorest Kenyans improve their financial access to health products and services. Many NGOs are exploring micro insurance schemes that build off of the NHIF, but so far none of these interventions has achieved scale or demonstrated compelling results.

• Although the government has recently invested more in conducting post marketing quality surveillance of drugs, substandard and fake drugs continue to be a significant problem in Kenya. The number of drug importers and distributors exceeds 200 and the ability of the government to police all of these importers and conduct pre-shipment testing or inspecting with their suppliers is extremely limited. Although most fake drugs are for high value items, some of the non-generic antimalarials and tests have been shown to be substandard. There are some concerns that with the shortage of supplies to conduct malaria testing for all suspected cases or if the subsidies of antimalarials are reduced, that it will increase the likelihood that more counterfeits and substandard malaria drugs and test kits will appear on the market.
The Assignment

In the annual planning meetings, Kenyan Ministry of Health officials have communicated to the World Bank Country Director that addressing malaria is a priority due to its leading cause of childhood mortality. The MOH has requested assistance from the World Bank to strengthen the MOH’s implementation of the NMS. Given Kenya’s long history of partnering with the private sector in the area of malaria, the MOH is open to exploring how to better harness private sector capacity. You and other team members have just arrived in Nairobi to develop assess private sector capacity and interest in malaria prevention and treatment. The team has two weeks to assess the situation and to develop a proposal to be presented in two weeks’ time to the MOH’s National Malaria Program Director and the World Bank Country Director. At this meeting, your team will present your assessment and recommendations on whether a market based approach is feasible.

To prepare for this meeting, the team members must first analyse the health system subsectors which impact prevention and treatment of malaria. Based on your analysis, identify one or more sub-sectors that will have the greatest likelihood of strengthening prevention and treatment of malaria. Second, identify the different markets within the selected subsectors. From the range of markets, select a feasible number in which to intervene. Use the following criteria to guide your market selection:

- Who are the market actors in the market(s)?
- What are the opportunities for using market forces to strengthen malaria prevention and/or treatment?
- What are the constraints in the market(s)? Do these need to be strengthened or relaxed?
- Is it feasible to intervene in this market(s)?
- How would you intervene?

Make a short “pitch” (presentation) to the judges showing your market analysis, and explaining your justification for wanting to intervene in this market. Select (volunteer) a member from your working group to deliver the presentation.

The judges will give you feedback on your “pitch” using the following points:
1) How thorough the market analysis is.
2) How strong your justification of market intervention is.
3) How feasible it is to intervene in the market you select.

You will have 15 minutes to present your proposed strategies to the judges.