

### Understanding the Antimalarials Market in Uganda

Rosette Mutambi, HEPS Uganda Martin Auton, Health Action International, The Netherlands ASTMH, December 7 to 11 2008 New Orleans

Curing Malaria Together www.mmv.org



Medicines for Malaria Venture

### Key findings

- 1. Recommended treatment is provided free in the public/mission facilities, but is not always available
- 2. ACTs are many times more expensive than the older ineffective medicines
- **3.** Complete courses of <u>all</u> antimalarial medicines are unaffordable to a significant proportion of the population
- 4. A family has to choose between basic needs like food and education, or purchasing medicines for the treatment of malaria
- Components of the final patient price are very different for different types of medicines in different types of outlet (e.g. manufacturers selling price, supply chain mark-ups)
- 6. Study provides an evidence base to guide initiatives to replace older ineffective medicines with ACTs





### Methodology

- Evolved from the WHO/HAI Medicine Prices Methodology [<u>www.haiweb.org/medicineprices</u>]
- Census approach across 9 districts of Uganda
  - everywhere selling medicines:
    - 750 outlets: public, mission & for-profit; formal & informal
  - all antimalarial medicines found:
    - 174 different entities, formulations, strengths and manufacturer permutations
- Mapped outlet spatial locations using GPS
- Supply chain and mark-ups investigated in Kampala (capital city & main commercial centre) plus 2 study districts
- Medicines for Malaria Venture in collaboration with Ministry of Health and Civil Society (HEPS)
- June September 2007



Measuring medicine prices, availability, affordability and price components

2ND EDITION





## Access to free public sector treatment can be limited

Only 16% of the outlets located in some Districts provided public sector care

(84% being for-profit)





# Access to free public sector treatment can be limited

Only 50% of public health facilities in some districts had <u>any</u> of the first-line recommended treatment

(ACT: artemether-lumefantrine)





### Access to licensed outlets can be relatively low

As many as 45% of the outlets in some districts were not supposed to sell medicines

(i.e. not licensed, informal)





#### Effective medicines are more expensive

## ACTs: up to 60 times more expensive

### compared to older (ineffective) antimalarials



### Effective medicines are unaffordable

### 11 days average household

income to purchase a <u>single course</u> of ACT for a 5 year old child





### Effective medicines are unaffordable

A family would need to forego 62 days of basic food in order to afford annual needs of **ACTs from the private** sector





### The poor cannot afford the cheapest medicines

The poorest **40%** population cannot even afford the price of the cheapest antimalarial found on the market (chloroquine)





### Unaffordability contributes to irrational use

Only **50%** purchased full course of even the lower priced (ineffective) antimalarials





# ACTs are unaffordable so not widely stocked by the private sector

As few as **4%** of private sector outlets in some districts stocked ACTs





## Price structures vary widely between products & sectors







### Conclusions

- The public and private sectors are both significant providers of antimalarial medicines
- ACTs are not always available in the public sector and are unaffordable in the private sector
- Different interventions are needed for the public and private sectors in order to increase access for <u>all</u> of the population
- There is a private sector supply chain to the village level (the older ineffective medicines get there)
- This study provides an evidence base for policy makers in Uganda and internationally to guide initiatives to replace older, ineffective medicines with ACTs



## Using the evidence: a pilot study to assess the impact of making subsidized ACTs available via the private sector



### Using the evidence: Civil Society

- Expanding the understanding of impact of medicine prices and availability on health
- Developing simple messages on medicine prices and availability for different audiences
- Engaging policy makers at different levels to be aware of impact of price and availability on health
- Public and media debates
- Justification for allocating for improving medicine management and money for medicines (Ministry of Finance)
- Using the evidence to monitor whether access expands to the poor



"350 Ugandan children die every day due to malaria in my country. This report provides clear evidence on how we can make life-saving ACTs available to this vulnerable population."



Hon. Dr. Stephen Mallinga, Minister of Health, Uganda



Medicines for Malaria Venture

### Affordability assumptions

- Family size 5.2: 2 x adults<sup>1</sup>
- Typical age structure: 1 x 15yrs; 1 x 7yrs; 1 x 2yrs<sup>2</sup>
- Annual malaria episodes: 2yr old: 4x; 7yr old: 3x; 15yr old & adults: 2x<sup>3</sup>
- Average income = cash plus inkind<sup>1</sup>
- Food needs: 2,100 K/cal per day<sup>4</sup>
- Full treatment courses
- Median prices of medicines and food items
  - 1. 2005/6 Uganda National Household Survey
  - 2. 2002 Uganda National Census
  - 3. Ministry of Health
  - 4. WFP/UNICEF

Medicines for Malaria Venture