The role of market intelligence in access to anti-malarial medicines: funding, procurement, and policy

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Presentation Outline

1. Review history and current status of transparency in medicines procurement
   - focus on HIV/AIDS, tuberculosis, and malaria

2. List some challenges faced in global malaria treatment

3. Present Boston University (BU) analytic data set & preliminary results of analyses on anti-malarial medicine procurements

4. Discuss additional utility of market intelligence data

5. Provide summary and conclusion
1. History & current status of transparency in medicines procurement (1)

- Until recently, information asymmetry was the norm
  - Producers and suppliers held intelligence on medicine quality & price; purchasers had very little information

- 2001 WHO Prequalification improved quality transparency
  - Web posting of medicines that passed quality testing
  - FDA followed with Tentative Approval Process and web posting

- 2002 Global Fund improved price transparency
  - Mandatory reporting and web posting of all commodity purchases
    - Price Reporting Mechanism, Price Quality Reporting Mechanism
  - 2005 WHO followed with Global Price Reporting Mechanism
    - Web posting of procurements from Global Fund and many others

- Unprecedented movement in transparency, but utilization of information not yet optimized
2. Challenges in Global Malaria Treatment

- Medicines used in malaria exist within a market framework
  - competition is a key to access to quality, affordable products
  - yet we know very little about markets and competition

- Massive investments in malaria
  - Practically no analysis of money spent on public sector procurements or global market evolution

- Desire to get more value for money

- Need to measure impact of new initiatives (AMFm), pooled procurement, etc., on market structure and access

- Programmatic design and global strategy decisions have not made use of existing market intelligence
3. Creation of BU analytic data set

Global Fund
1st Price Reporting Mechanism

Global Fund
2nd Price Reporting Mechanism

Merged Global Fund/WHO Data

Identify & remove duplicates
Clean variables
Code
Classify
Validate

Add >100 additional variables

Final BU Data Set

WHO
Global Price Reporting Mechanism

FDA & WHO PQ
CHAI Prices
Differential Prices
WHO Regimens
Country Demographics
Disease Burden
# Treated
GF Disbursements
Many others

Country
Medicine
Strength, Dosage Form
Quantity
Price
Manufacturer
Purchaser
Other
## Anti-Malarial Medicines Transactional Overview

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tbody>
<tr>
<td>Dates</td>
<td>Jan 2004 – July 2009</td>
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<tr>
<td># Transactions</td>
<td>1,111</td>
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<tr>
<td>Total Amount $US</td>
<td>$215,065,448</td>
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<td># Countries</td>
<td>61</td>
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<td># Dosage Forms</td>
<td>67</td>
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<tr>
<td># Manufacturers*</td>
<td>30</td>
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*only 8 manufacturers are WHO-Prequalified*
Market Share by WHO Region (value)

- **African**: 95%
- **EMRO**: 2.3%
- **W Pacific**: 1.9%
- **South-East Asia**: 1.9%
- **Western Pacific**: 1.9%
- **Eastern Mediterranean**: 1.9%
- **Americas**: 1.9%
Reported Market Value (USD)
Anti-malarial medicines by drug type

ACT market
- 2009: $62.2 million
- 2008: $50.6 million
- 2007: $44.7 million
- 2006: $39.6 million
- 2005: $39.6 million
- 2004: $41.2 million
Manufacturer Market Share of ACTs (value among multiple donors)

Value in USD

- **2009**: $62.2 million
- **2008**: $50.6 million
- **2007**: $44.7 million
- **2006**: **$37.7 million**
- **2005**
- **2004**

Companies:
- Activa
- Ajanta
- Beijing Holley-Cotec
- Cipla
- Dafra
- Guilin
- Ipca
- Novartis
- Sanofi-Aventis
- Sanofi-Synthelabo
- Strides
Manufacturer Market Share of any SP-containing medicine (value)

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Value in USD
Quinine Purchases by Country

Only 14 countries and 1 multi-country region reported purchasing quinine; Quinine is drug of choice for severe malaria.
Any SP-Containing Medicine Purchases by Country

Value in USD

35 countries list SP for treatment in pregnancy; 16 report purchase of SP
Drug Purchases are a Very Small % of GF Malaria Disbursements (plots are per country per round)

Total GF Disbursements = $1.48 billion
Total malaria purchases = $186.8 million
Illustrative Example of Potential Timeline Analyses*

*Date variables are PROBLEMATIC and need further cleaning
Potential Utility of Data

Analytic Potential
- Market Impact and market changes
  - Pricing strategy, quality, global policy/donor decisions
- Dispersion/Uptake of new products
- Country reaction to WHO guideline changes
- Health Outcomes
- Value for Money

Country Potential
- Procurement efficiency, capacity building
- Awareness of new products, price changes, etc.

Program Potential
- Link data to systems: budgets, proposals, reports, m&e, purchasing
Example with Antiretroviral Medicines:
Large Scale Purchase Arrangements

- Pooled procurement, SCMS, and UNITAID will change market structure

Multiple regression of 7,253 ARV purchases*
- 19 of 24 (79%)
  ARV dosage forms revealed no price-volume association*

5. Summary and Conclusions

Global Fund and WHO changed the landscape around transparency of medicine information on price and quality.

Data can be enhanced and used to:
- Identify, describe and quantify problems; Design interventions;
- Examine impacts of past policies & strategies to build an evidence base;
- Predict impact of new policies & Project future costs for donors.

Data can also empower country users if provided in a more user-friendly format:
- Provide timely “market intelligence” to procurement staff;
- Allow benchmarking of performance;
- Guide countries in regimen selection; Facilitate demand forecasting.

Transparency has risks, too!
- Need higher level discussion on appropriate level of transparency.
Thank you

Acknowledgements

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