ACT market: latest demand forecasts methods
Presentation by BCG, CHAI and MIT-Zaragoza

October 12, 2010
Objectives for this presentation

Introduce a new UNITAID-sponsored consortium that will provide global demand forecasting for ACTs and artemisinin

Highlight lessons learned from our experience forecasting in this market
  • And how we are factoring those lessons into our approach going forward

Gain your input on key market scenarios and variables impacting demand

Lastly, share the most results of CHAI's forecasting model, along with some market intelligence around the AMFm roll-out
UNITAID will sponsor a demand forecasting service for ACTs

"In order to contribute to better supply management, improved demand forecasts of ACTs and of artemisinin required are urgently needed to enable appropriate planning."

– UNITAID Request for Proposal

The purpose of this consultancy is to deliver three forecasts that can inform policy decisions and planning:

(i) a forecast of the global ACT demand

(ii) including and specifying a forecast of the demand for AMFm subsidized ACTs, and

(iii) a forecast of the total artemisinin required for this ACT demand
BCG, CHAI, and MIT-Zaragoza have formed a new demand forecasting consortium
Agenda

Looking back

• Lessons learned from historical forecasting approaches
Several groups have forecasted ACT demand over time
Compilation of forecasts – circa early 2009

Total ACT Demand

Millions of treatments

- ACTs delivered (actual)
- BCG demand forecast scenarios
- Demand forecasts from other groups

2010 demand spike due to large Global Fund Round 8

Increased public sector demand & faster AMFm uptake

ACTs delivered

BCG Baseline

MIT-Z maximum/minimum

Sanofi-Aventis

CHAI maximum

CHAI minimum

Artepal/FSC

Delayed phases Ila and Iib

Only one phase of AMFm

No AMFm (public sector only)

Malaria Cases (millions)

- 247 in 2006
- 135 in 2020 GMAP target

Note: 2008 Actual treatments projected from actual Novartis distribution of Coartem and assuming constant market share
Why such a broad range of predictions?
Different inputs, assumptions and methodologies

Inputs
• Global Fund PSM plans
• PMI procurement plans
• NMCP / partner assessment
• Other sources

Assumptions
Impact of AMFm on demand
Private sector demand
• Pilots vs. survey data vs. published literature

Methodologies
Top down or bottom up
Lag time / leakage from grant to procurement

Examples

Key challenges
Limited access to actual sales to vet forecasts
AMFm's "novelty" – and its uncertain impact
Market heterogeneity and lack of transparency in private market
Will the track record of the past continue?
Or will things improve with experience?
In practice, some forecasts were very close to actual demand

Forecasts and actual ACT shipments for 2009

Millions of ACT treatments sold

MIT-Zaragoza (Forecasted sales)

WHO survey data (Actual public sector sales)

Undiscounted

Discounted
But while the forecast accuracy is increasing, there is a need for improved processes in several areas

Multiplicity of forecasts and methodologies is confusing
  • Preference for a consensus forecast built on best practices / lessons learned

Changes in supplier base will make the market more complex to understand
  • Increasing number of suppliers leading to a more fragmented market
  • Potential impact of new technologies on current market shares

Introduction of AMFm adds significant uncertainty in demand...
  • Timing of countries coming "online"
  • Degree to which AMFm expands demand vs. shifts demand across channels

... But also gives greater real-time visibility into private sector dynamics
  • Opportunity to adjust forecasts based on more recent market shifts

Given investment cycles, there is a growing need for tools to model scenarios
  • e.g., Impact of policy and funding changes, or of new technologies / RDTs
Looking forward
We intend to make several changes in the methodology

Creating a single "consensus forecast" across countries
  • Selecting one "best" number from a set of forecasting approaches

Incorporating new sources of information into our modeling
  • Global Fund Price and Quality reporting mechanism
  • AMFm procurement records
  • In-country vetting of assumptions, with a focus on high-burden countries

Increasing frequency of updates to allow for more real-time adjustments

Making specific adjustments to account for the roll-out of the AMFm
  • "Forecast tracking signal" updated on regular basis with real-time order data

Placing a greater emphasis on sensitivity analysis to inform policy choices and enable better planning for market risks
AMFM order data provides good, near-real-time information

8.9M AMFM orders in 5 countries placed to date (July 1-Sept 29, 2010)

What you should expect from us

An openness to input from you and other stakeholders
  • Data and market intelligence
  • Views on what scenarios and sensitivities matter

A commitment to transparency in our methodology and communication

A consensus view, one that will improve over time
Agenda

Key scenarios and sensitivities to explore
**Sensitivity analyses can point out key risks and what they depend on**

*Example: Sensitivity analysis of supply shortages over time*

<table>
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<th>Scenario</th>
<th>2009 (%)</th>
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<th>2010 (%)</th>
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<th>2011 (%)</th>
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<th>2012 (%)</th>
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Agenda

Most recent CHAI forecast
Questions and answers

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