Global Fund Sourcing of Health Products Strategy Review 2016
ARV procurement: Improving supplier performance management to drive value for the patients

November 2016
Geneva, Switzerland

The Global Fund
The Global Fund is working to deliver on its mission “Investing the world’s money to defeat AIDS, tuberculosis and malaria”, and focuses on value to the patients rather than on shareholder value.

The Global Fund finances treatment for 48% of all patients, with half of them (24% of total) served through Pooled Procurement Mechanism (PPM).

There are issues with the supply system, with suppliers performance varying widely despite improvements:
- Delivery OTIF for top 7 suppliers ranges from 40% to 88%,
- Example: One supplier had 76% of product deliveries late, with ~10% of product deliveries being late 100 or more days.

Two factors drive overall supply performance: demand management and performance of suppliers.

One complicating factor are issues with demand management:
- Quarterly order volume varies by up to 50% from quarter to quarter
- 76% of all orders are placed with less than 6 months lead time, i.e. as rushed orders and outside of regular planned procurement cycle

The Global Fund understands those issues, and is working to address them through better demand visibility and improved demand forecasting.

However, our key focus is to make the supply system more balanced by working towards improved supplier performance along 5 dimensions: cost competitiveness, performance, sustainability, risk management and benefits sharing.

The Global Fund finances treatment for 48% of all patients, with half of them (24% of total) served through Pooled Procurement Mechanism (PPM).
Deep-dive into the 5 dimensions: changes introduced in 2015 to improve on key important factors led to material improvements in product supply without jeopardizing market sustainability

Cost competitiveness: suppliers, who originally quoted 15% above the Global Fund asking price, voluntarily offered 14% below the Global Fund asking price in their revised offer (34% price reduction from initial offer)

Performance:
- OTIF increased by over 30% (15-25 percentage points) for all suppliers
- Volume-weighted OTIF across all suppliers increased from 41% to 75%
- Key supplier has developed a product with 60 months shelf-life (67% increase from 36 months before)
- Lead times reduced by ~50 %

Sustainability: long-term contract agreements helped against opportunistic pricing, which was driving performance deterioration (increased delays of up to 170 days) and price volatility (up to 5% fluctuations month-to-month)

Risk management: supplier base is kept robust to minimize the risk of product supply – working with 11 suppliers, and had framework agreements with 8 of which six had substantial volumes relative to their product offering

Benefit sharing through various means: Wambo.org, publishing reference pricing, and framework agreements

Procurement system transformation affects multiple dimensions, including e.g.:
- Timing: moving from spot purchases – to long-term contract agreements
- Relationships: from transactional – to strategic partnerships based on transparent selection criteria
- Visibility: from “black box approach” – to guidance on how to improve, and focus on demand visibility
- Cost efficiency: from push for the lowest price – to joint cost optimization
- Perception: from market positioning and history – to performance-based awards with some changes already being implemented with anticipated results seen, and others to be rolled-out shortly

This is not an easy change, but it is necessary – and it has certain expectations from all players:
- The Global Fund: ensure transparency, adhere to commitments and improve demand visibility
- Principal recipients: comply with PPM requirements, and improve SC and inventory transparency
- Cost efficiency: deliver strong performance, act as a partner and focus on continuous improvement
The Global Fund is working to deliver on its mission, which drives our procurement strategies and implementation approach.

"Investing the world’s money to defeat AIDS, tuberculosis and malaria"

The Global Fund aims to maximize the number of lives saved and to build resilient and sustainable healthcare systems.
The Global Fund Pooled Procurement addresses only small segment of the total ARV spend – but accounts for 24% of patients

<table>
<thead>
<tr>
<th>Share of people treated, percent</th>
<th>xx Spend, as % of total (USD bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ARV</td>
<td>100% (17,0)</td>
</tr>
<tr>
<td>First line ARV</td>
<td>80% (13,4)</td>
</tr>
<tr>
<td>LMIC first line</td>
<td>8% (1,4)</td>
</tr>
<tr>
<td>The Global Fund</td>
<td>3% (0,6)</td>
</tr>
<tr>
<td>TGF pooled procurement</td>
<td>2% (0,3)</td>
</tr>
<tr>
<td>Second and third line therapies</td>
<td></td>
</tr>
<tr>
<td>High income countries (e.g. US, DE, FR, IT, ES, UK)</td>
<td>6%</td>
</tr>
<tr>
<td>PEPFAR, South-African Government, others (e.g. UNICEF)</td>
<td>6%</td>
</tr>
<tr>
<td>Countries buy through spot tenders</td>
<td></td>
</tr>
</tbody>
</table>

1 Numbers are estimated and may not add up to 100%

NOTE: ARV = Anti-Retroviral Treatment; PEPFAR = U.S. President’s Emergency Plan for AIDS Relief; LMIC = Low and Middle-Income Countries

SOURCE: Clinton Foundation, WHO, Global Fund, PEPFAR, Avert
Supplier OTIF for ARV products is low and highly variable – creating potential risks for patients

LZN example: one supplier in 2013/2014 had 76% of product deliveries late, with ~10% of product deliveries being late 100 or more days

Number of stockouts have reduced over the past 3 years

Note: LZN is a first-line HIV treatment drug, a combination of Lamivudine, Zidovudine and Nevirapine
Two factors drive overall supply performance: demand management and performance of suppliers.
The Global Fund knows about issues in demand management, and is currently reviewing its processes.

Order volume fluctuates significantly...

Order placement lead time and order fulfillment lead times, %, 2016

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Order Placement Lead Time</th>
<th>Order Fulfillment Lead Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 3 months</td>
<td>13%</td>
<td>37%</td>
</tr>
<tr>
<td>3 - 6 months</td>
<td>21%</td>
<td>39%</td>
</tr>
<tr>
<td>6 - 9 months</td>
<td>12%</td>
<td>30%</td>
</tr>
<tr>
<td>&gt; 9 months</td>
<td>13%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Better demand management needed

Planned procurement, enabling best value (product and freight costs)

NOTE: Lead time is defined as a time between purchase order being sent to vendor, and a shipment delivery date. Includes planned delivery.
The Global Fund has introduced a more balanced supply system based on 5 elements to improve supplier performance.

- **Cost competitiveness**: Providing products at the lowest possible affordable and sustainable price to reach the maximum number of patients. Reducing price volatility and eliminating predatory pricing.

- **Performance**: Supplying product timely and in full. Incentivizing suppliers to introduce better formulations.

- **Sustainability**: Supporting new suppliers to ensure sufficient supply and mitigate geographic supply risks. Investing in suppliers with sustainable manufacturing practices.


Price reduction was achieved through managed collaboration with the suppliers – prices dropped even further since

**Supplier behaviors**

<table>
<thead>
<tr>
<th>Quoted tender price, TLE, USD per pack</th>
<th>Actual price, TLE, USD per pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial 11</td>
<td>1H 2015 10</td>
</tr>
<tr>
<td>0%</td>
<td>15%</td>
</tr>
</tbody>
</table>

- **Some suppliers responded** to Global Fund target pricing, but **others could not or would not** – offering 15% higher than the target price
- After the allocation, suppliers who could not offer target pricing subsequently **reduced prices by up to 14% below the target pricing**, which were captured through the “most favored nation” clause

**SOURCE:** The Global Fund TLE pack prices

**NOTE:** TLE – combination of tenofovir (TDF) in combination with lamivudine (3TC) and efavirenz (EFV)
Changes introduced in 2015 improved supply performance

Supplier delivery performance (OTIF) has improved ...

- Supplier OTIF increased by 35-45% (15-25 percentage points) for all suppliers
- Volume-weighted OTIF improved from 41% to 75%

... and lead times and urgent orders reduced

- Since implementing vendor managed inventory (VMI) in 2015, average lead time to delivery decreased by 47% (from 142 to 75 days)
- Number of urgent orders went down from over 25% in 2015 to under 20% in 2016

1 Simple non-weighted average across top 7 suppliers
2 For Rapid Supply Mechanism (RSM) products, time of order to time of demanded delivery by PR
3 Less than 3 months between ordering and time of demanded delivery by PR
Lowest price often means poor performance

- Low-price supplier consistently **undercuts prices** in the market…

- … which allows them to secure **high share of orders** (~50%)…

- … however, the **delivery performance** is low

---

**Product price**, LZN, 2013-2014, USD per pack

- **Low-price supplier**
- **Median supplier**

**Share of orders, %**

- **Q1 2013**
- **Q2**
- **Q3**
- **Q4**
- **Q1 2014**

**Average delay, days**

- **Median**
- **Low-price**

**Maximum delay, days**

- **Median**
- **Low-price**

**Note:** LZN is an first-line HIV treatment drug, a combination of Lamivudine, Zidovudine and Nevirapine
Robust supplier base maintained, minimizing supply risks

**Supplier base evolution**

<table>
<thead>
<tr>
<th>Supplier</th>
<th>2014 Actual (PPM)</th>
<th>2015 Actual (PPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier 1</td>
<td>29%</td>
<td>56%</td>
</tr>
<tr>
<td>Supplier 2</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Supplier 3</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Supplier 4</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Supplier 5</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Supplier 6</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Supplier 7</td>
<td>0%</td>
<td>small</td>
</tr>
<tr>
<td>Supplier 8</td>
<td>small</td>
<td>small</td>
</tr>
<tr>
<td>Others suppliers</td>
<td>8%</td>
<td>small</td>
</tr>
</tbody>
</table>

• In 2015, the Global Fund worked with 11 suppliers, and had **framework agreements** with 8 of which **six had substantial volumes** relative to their product offering
• More **suppliers have multiple API sources**
• **New entrants and diversification of the geographical** supplier base are encouraged
• Top 4 low-and-middle income countries suppliers **had a combined market share of 71%** in 2015 – and Global Fund allocation to them is **81% in 2014** (before tender), **and 90% in 2015**
Benefit sharing with suppliers and principal recipients is achieved through various means of collaboration.
## Main changes to achieve a balanced supply system

<table>
<thead>
<tr>
<th>Until 2014</th>
<th>Since 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timing</strong></td>
<td><strong>Long-term tender agreements</strong></td>
</tr>
<tr>
<td>Spot market purchases</td>
<td>• Improved forecasting leading to higher committed purchase volumes</td>
</tr>
<tr>
<td>• Purchase of orders on a need basis, potentially leading to unpredictable pricing and performance</td>
<td>• Bundled volumes with lower volume drugs to ensure availability</td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td><strong>Strategic partnerships</strong></td>
</tr>
<tr>
<td>Transactional relationships</td>
<td>• Preferred suppliers of choice based on quality of supplier</td>
</tr>
<tr>
<td>• Relationship purely based on one-time buyer–supplier interactions</td>
<td>• Quality standards transparency</td>
</tr>
<tr>
<td><strong>Visibility</strong></td>
<td><strong>Transparent selection criteria</strong></td>
</tr>
<tr>
<td>Black box</td>
<td>• Full transparency into selection criteria</td>
</tr>
<tr>
<td>• No clear visibility as to how the contract distribution has been allocated</td>
<td>• Support as to how to improve to acquire higher share</td>
</tr>
<tr>
<td><strong>Cost efficiency</strong></td>
<td><strong>Joint cost optimization</strong></td>
</tr>
<tr>
<td>Lowest price</td>
<td>• Keep number of suppliers high</td>
</tr>
<tr>
<td>• Price push to ensure high quantity with little regard to sustainability and quality</td>
<td>• Grow new suppliers</td>
</tr>
<tr>
<td><strong>Perception</strong></td>
<td><strong>Awards based on performance</strong></td>
</tr>
<tr>
<td>Market position</td>
<td>• Ensure quality of products</td>
</tr>
<tr>
<td>• Selection based on history and market positioning</td>
<td>• Evaluation based on supplier’s technical capabilities and commercial terms</td>
</tr>
</tbody>
</table>
This is not an easy change, but it is necessary – and it has certain expectations from different players

> Ensure process transparency to all stakeholders
> Adhere to long term contracts and commitments
> Improve demand management and visibility
> …

> Understand and comply with pool procurement mechanisms (incl. implications for order leads times)
> Improve supply chain and inventory transparency
> Improve demand forecast methods
> …

> Improve delivery performance (OTIF, PO confirmation)
> Commit on providing high quality products
> Act as a partner and focus on joint improvement opportunities
> …
Selection of suppliers depends both on commercial and other technical / value criteria

- **Commercial**
  - Initial price
  - Target pricing: 1st line products; equalization of pricing for alternate 1st and 2nd line products; better pediatric formulations

- **Technical and Value**
  - Delivery performance (OTIF)
  - Quality elements: shelf life, national registrations
  - API supply security (alternative sources)
  - Supply of high and low volume products
  - Commitment, ability and approach

**Supplier / product score**
- **Commercial**: 45.5%
- **Technical and Value**: 54.5%