2021 Annual ARV Buyer Seller Summit
Master Slide Deck
# Annual ARV Buyer Seller Summit Table of Contents

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>SPEAKERS/MODERATORS</th>
<th>PAGE</th>
</tr>
</thead>
</table>
| Welcome Remarks                                         | Mr. Cathal Meere, *Pharma Sourcing Manager*, The Global Fund  
Ms. Khadija Jamaloodien, *Director of Affordable Medicines*, South Africa National Department of Health  
Dr. Christine Malati, *Pharmaceutical Adviser*, Office of HIV/AIDS, USAID | 3    |
| 18 Month Consolidated Forecast                          | Mr. Rajeev Batohi, *South Africa Lead*, Africa Resource Centre                      | 29   |
Mr. Zafar Yuldashev, *Procurement Specialist*, United Nations Development Programme  
Moderated by Mr. Daniel Kiesa, *Senior Adviser for Market Intelligence*, USAID | 53   |
| Individual Highlights for Each Procurement Channel with opportunity for Q&A | Mr. Dessalegn Tesfaye, *Senior Supply Chain Advisor*, USAID|Rwanda  
Ms. Suzan NakawUnde, *Health Commodities Programme Management Specialist*, USAID|Uganda  
Moderated by Dr. Messai Belayneh, *Pharmaceutical and Supply Chain Advisor*, USAID | 74   |
| PEPFAR Priorities                                       | Dr. Katy Godfrey, *Senior HIV Care and Treatment Technical Adviser*, S/GAC         | 91   |
|                                                        | Dr. Hilary Wolf, *Senior Pediatric Technical Adviser*, S/GAC                      | 107  |
|                                                        | Dr. Sara Klucking, *HIV Prevention Lead*, S/GAC                                   | 114  |
|                                                        | Dr. Kanjinga Kakanda, *Senior TB/HIV Technical Advisor*, S/GAC                     | 119  |
|                                                        | Moderated by Dr. Christine Malati, *Pharmaceutical Adviser*, USAID                 |      |
| Individual Highlights for Each Procurement Channel with opportunity for Question and Answer | Mr. Alan Pringle, *Global Supply Chain Director*, Global Health Supply Chain – Procurement & Supply Management  
Ms. Khadija Jamaloodien, *Director of Affordable Medicines*, Republic of South Africa  
Ms. Uranchimeg Badarch, *Specialist, Strategic Sourcing Pharmaceuticals*, The Global Fund  
Mr. Jordi Balleste, *Unit Chief, Strategic Fund Procurement, Procurement and Supply Management*, Pan American Health Organization  
Moderated by Mr. Daniel Kiesa, *Senior Adviser for Market Intelligence*, USAID | 126  |
| GS1 Rollout                                             | Ms. Lindabeth Doby, *Senior Management Information Systems Advisor*, USAID        | 165  |
|                                                        | Mr. Mathieu Courtois, *Manager, Data, Analytics, Processes and Tools Team/Head of Wambo*, The Global Fund | 172  |
|                                                        | Mr. Umesh K, *Senior Vice President for Global Antivirals*, Aurobindo Pharma Limited  
Ms. Rachel Smith, *Global Standards Technical Specialist*, Global Health Supply Chain – Procurement & Supply Management | 181  |


Annual ARV Buyer Seller Summit

Oct 13 – 14, 2021
Investing for Impact

- The Global Fund is one of the world’s largest funders of global health.
- We have disbursed more than US$50 billion since 2002 to respond to HIV, TB and malaria and for programs to strengthen systems for health across more than 155 countries, including regional grants.
Investing for Impact

International grants provided by the Global Fund in 2020

- 25% of all international financing for HIV
- 77% of all international financing for TB
- 56% of all international financing for malaria

8 The Global Fund measures overall funding in US dollars but pledges and contributions are made in multiple currencies.

Key HIV results for 2020 in countries where we invest

21.9 million people on antiretroviral therapy for HIV*

*Programmatic results achieved during 2020 by countries and regions where the Global Fund invests. Progress graphs are based on latest published data from WHO (2020 release for TB and malaria) and UNAIDS (2021 release). Malaria coverage calculated based on 38 African countries for which data is available from WHO / Malaria Atlas Project estimates.
Trends in AIDS-related deaths

In countries where the Global Fund invests

- With prevention and ARVs (actual)
- If there had been no prevention or ARVs

% change, 2002-2020

+230%
If no prevention or ARVs

-65%
Actual change

Age-sex breakdown, 2020

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th></th>
<th>Male</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 years</td>
<td>8%</td>
<td>15-49</td>
<td>7%</td>
<td>0-14</td>
<td>36%</td>
<td>12%</td>
</tr>
<tr>
<td>50+</td>
<td></td>
<td></td>
<td>8%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Global Fund was founded

THE GLOBAL FUND
Trends in new HIV infections
In countries where the Global Fund invests

With prevention and ARVs (actual)  If there had been no prevention or ARVs

% change, 2002-2020

+167%  If no prevention or ARVs

-54%  Actual change

The Global Fund was founded

Age-sex breakdown, 2020

Female  Male

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 years</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>15-49</td>
<td>47%</td>
<td>34%</td>
</tr>
<tr>
<td>50+</td>
<td>7%</td>
<td>3%</td>
</tr>
</tbody>
</table>

HIV burden estimates from UNAIDS, 2021 release. Estimation of “no prevention or ARVs” trends from Goals, AEM and AIM models.
Investing for Impact
Pooled Procurement Mechanism Savings

### Pooled Procurement Mechanism results

<table>
<thead>
<tr>
<th>Product</th>
<th>Delivery Volumes</th>
<th>Price Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antiretroviral therapies</td>
<td>7.7m</td>
<td>-50%</td>
</tr>
<tr>
<td>Antimalarials</td>
<td>182m</td>
<td>-39%</td>
</tr>
<tr>
<td>Mosquito nets</td>
<td>135m</td>
<td>-36%</td>
</tr>
</tbody>
</table>

### Financial management systems meeting defined standards

Number of countries:

- **Target 6**
- **Actual 5**
- **Target 16**
- **Actual 13**
- **Target 26**
- **Actual 23**
- **Target 36**
- **Actual 26**
- **Target 46**
- **Actual 46**

- **COVID-19 pandemic begins**

Defined standards are measured as at least 80% of agreed actions for improvement of financial systems implemented. Countries targeted include High Impact and Core Countries where the use of Public Financial Management Systems or Donor-Integrated Systems are not feasible. Hence, the Global Fund supports grant implementers to strengthen their financial management systems for effective and efficient management of grants/programs. Target action relates to agreed actions to strengthen the people, processes, and information systems of financial management systems. Financial management systems meeting defined standards represent only one of multiple PSM key performance indicators.
Fighting COVID-19
Time for another global push to save lives

As of August 2021, we had approved US$4 billion to support countries to respond the pandemic with critical tests, treatments and medical supplies, protect front-line health workers, adapt lifesaving HIV, TB and malaria programs, and reinforce fragile systems for health.
Global Fund Results Report 2021
Feature Film: We Can’t Go Backwards
“Just as 20 years ago, when the Global Fund partnership galvanized the world to fight the world’s leading infectious diseases, it is time for another global push to save lives. We must protect the gains made against HIV, TB and malaria.”

Peter Sands
Executive Director of the Global Fund
Thank you
Welcome to the ARV Summit!

Christine Y. Malati, PharmD
13 to 14 October 2021
2021 Annual ARV Buyer Seller Summit
**GOAL**
Equip ARV manufacturers with an understanding of PEPFAR priorities to inform research, development, and manufacturing plans.

**OBJECTIVES**
1. Celebrate the accomplishments of the past 18 years of PEPFAR.
2. Explain the impact of treatment optimization on product forecast and viral load suppression.
3. Articulate strategies for ensuring a client centered supply chain with private sector engagement.
72.9% of all PLHIV
Figure 1. PEPFAR-funded PHIAs – Countries Showing Achievements toward the Global HIV SDG 90/90/90 Goals

Lesotho
Ages 15-59 (2020)*: 96%
Ages 15-64 (2020): 92%
Ages 15-64 (2017): 89%
Ages 15+ (2016): 90%

Zimbabwe
Ages 15-59 (2020): 89%
Ages 15-64 (2020): 87%
Ages 15-64 (2017): 90%
Ages 15-64 (2016): 91%

Namibia
Ages 15-64 (2019): 96%
Ages 15-64 (2017): 96%
Ages 15-64 (2016): 97%

Rwanda
Ages 15-64 (2019): 97%
Ages 15-64 (2017): 96%
Ages 15-64 (2016): 90%

Eswatini
Ages 15+ (2016): 91%

Kenya
Ages 15-64 (2018): 97%
Ages 15-64 (2017): 91%
Ages 15-64 (2016): 91%

Ethiopia
Ages 15-64 (2018): 97%
Ages 15-64 (2017): 90%
Ages 15-64 (2016): 88%

Malawi
Ages 15-64 (2018): 77%
Ages 15-64 (2017): 71%
Ages 15-64 (2016): 69%

Zambia
Ages 15-59 (2016): 64%
Ages 15-64 (2016): 55%
Ages 15-64 (2017): 55%

Uganda
Ages 15-64 (2016): 61%
Ages 15-64 (2017): 50%

Tanzania
Ages 15-64 (2017): 47%
Ages 15-64 (2018): 56%

Nigeria
Ages 15-64 (2018): 47%

Cameroon
Ages 15-64 (2018): 50%

Cote d’Ivoire
Ages 15-64 (2018): 41%

*Lesotho results are viral load-adjusted; other countries are ARV-adjusted.
Pace and Magnitude of Paediatric ARV Transitions

Source: GHSC-PSM. Data current as of October 12, 2021.
Pace and Magnitude of Adult ARV Transitions

- **2006:** Patients transitioned off d4T.
- **2010:** TLE and LZN recommended as first line.
- **2013:** EFV with TL or TE recommended as first line for patients starting ART.
- **2016:** DTG with TL or TE recommended as alternate first line.
- **2017:** FDA tentatively approves TLD.*
- **2019:** WHO recommends TLD as first line preferred for all adult and adolescents.

Source: GHSC-PSM. Data current as of October 12, 2021.
Products Procured by PSM in Equivalent Monthly Treatments Categorized by 1, 3, + 6 Month Product Size

Product Size
- 1 month
- 3 month
- 6 month

Calendar Year, Quarter by Estimated/Actual Delivery Date

Equivalent Monthly Treatments
- 40M
- 30M
- 20M
- 10M
- 0M

Product Size Percentage
- 100%
- 80%
- 60%
- 40%
- 20%
- 0%

Calendar Year, Quarter by Estimated/Actual Delivery Date

Adult ARVs Included
- TAF-ED: Dolutegravir/Etravirine/Tenofovir AF 50/200/25 mg Tablet, 90 Tablets
- TLD: Dolutegravir/Lamivudine/Tenofovir DF 50/300/300 mg Tablet, 90 Tablets
- TLE: Efavirenz/Lamivudine/Tenofovir DF 400/300/300 mg Tablet, 90 Tablets
- LZN: Nevirapine/Lamivudine/Zidovudine 200/150/300 mg Tablet, 60 Tablets
Guiding Principles for the Next Phase of PEPFAR

1. DELIVER inclusive people-centered HIV Px and Tx Services

2. SUPPORT resilient and capacitated partner country health and community systems

3. PARTNER for greater impact, burden sharing and sustainability
1. Local Procurement Service Agents
   - Rwanda Medical Supply

2. Vendor Managed Solutions

3. Long acting formulations for prevention and treatment
All of these interventions will enable us to achieve 95 95 95 by 2030!
Thank you!
CAVEATS AND LIMITATIONS TO THE CURRENT VERSION OF THE VISIBILITY DATA

- **Conservative estimates** based on currently confirmed orders and firm demand
- Prepared based on data currently available to The Global Fund, PEPFAR, and South Africa
  - TGF forecast for Q1 2023 is a conservative estimate of current demand visibility; this is to account for any influence of the Global Fund Grant Cycle (i.e. final year of grant) versus real demand; additional volumes may materialize
  - Includes data from UNDP
- **Preliminary estimates for discussion and planning** – not final purchase commitments
  - Some country submissions used the July 2021 submission instead of the Oct 2021 submission; TBD volumes were not included
- **May not yet fully capture lead times** between order placement at manufacturer and in-country delivery
- **Tenth joint** consolidated procurement forecast. Next scheduled release is May 2022.
TLD 28-30 TABLETS; SOUTH AFRICA IS THE MAIN MARKET

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TLD 84-90 TABLETS; HIGH DEMAND FOR Q2 2022

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
Notes: SA volumes subject to 2022 tender award outcome
TLD 180 TABLETS; PEPFAR DRIVING DEMAND

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TLD TABLETS (ALL PACK SIZES)

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
Notes: Note the switch from packs to millions of tablets for this graph.
DTG 50 MG, 30 TABLETS; CYCLICAL DEMAND WITH Q1 PEAKS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
DTG 50 MG, 90 TABLETS; NO DEMAND INDICATED

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
DTG 10 MG, 90 SCORED, DISPERSIBLE TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
Notes: TGF forecast for DTG10 is based on an anticipated shift in demand from paediatric LPV/r (pellets, granules, and tablets) – which is not yet in grant planning documents
TEE/TLE 600 MG, 28 TABLETS; SOUTH AFRICA IS THE MAIN MARKET

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TEE 600 MG, 84-90 TABLETS; SOME DEMAND EXPECTED IN SOUTH AFRICA IN THE NEW TENDER

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TLE 400 MG, 30 TABLETS; GLOBAL FUND IS THE MAIN DRIVER

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TLE 400 MG, 90 TABLETS; LARGE CYCLICAL Q1 DEMAND INDICATED

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TDF/FTC 300/200 MG, 30 TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
TDF/3TC 300/300 MG, 30 TABLETS; DEMAND DROPS OFF LATER IN PLAN

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
LPV/r 200/50 MG, 112-120 TABLETS

000’s of packs

Q4 2021: South Africa 692, PEPFAR 0, Global Fund 288
Q1 2022: South Africa 670, PEPFAR 13, Global Fund 208
Q2 2022: South Africa 674, PEPFAR 39, Global Fund 16
Q3 2022: South Africa 674, PEPFAR 39, Global Fund 16
Q4 2022: South Africa 681, PEPFAR 39, Global Fund 16
Q1 2023: South Africa 667, PEPFAR 4, Global Fund 148

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
LPV/r 100/25 MG, 56-60 TABLETS

Source: Submissions from PEPFAR, Global Fund, South Africa, Ethiopia, Uganda
Notes:
LPV/r 40/10 MG ORAL GRANULES, 120 SACHETS

Source: Submissions from PEPFAR, Global Fund, South Africa, Ethiopia, Uganda

Notes:
LPV/r 40/10 MG ORAL PELLETS, 120 CAPSULES

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
ABC/3TC 600/300 MG, 30 TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
ABC/3TC 120/60 MG, DISPERSIBLE 30 TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
AZT/3TC 300/150 MG, 56-60 TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
ATV/r 300/100 MG, 30 TABLETS

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
NEVIRAPINE 10 MG/ML ORAL SUSPENSION, 100 ML

Source: Submissions from GHSC-PSM, Global Fund, South Africa, Ethiopia, Uganda
Ethiopia’s update on HIV Program and ARVs Procurement

Annual ARV Buyer and Seller Summit
Ethiopia is a Federal State having ten regional states and two City Administrations.

In 2021, total projected population: 102,998,001 (CSA Projection)

Annual New infections estimate in 2021 – 10,943

Annual AIDS related deaths in 2021 - 11,673
HIV/AIDS services is provided at
- 1500 ART sites (>500 second line sites, 50 Third Line sites)
- 2865 PMTCT only sites
- 14 Regional Laboratories

The source of finance is The Global Fund, USAID/PEPFAR, Government

National Program Owners and Implementers
- MoH
- FHAPCO
- EPSA
- EPHI
- EFDA

DSD Models
- ASM
- FTR
- UHEW managed CAG
Regimen Composition

**Adult First Line**
- 85% Adult on DTG Based Regimens
  - 84% on TLD
- Remaining 15% on EFV based regimens

**Adult Second Line**
- 89% on ATV/r based PI Regimens
- 11% on LPV/r based PI Regimens

**Adult Third Line**
- DRV/r + DTG based regimens

**Paediatrics**
- Previous shifts from AZT/3TC/NVP based regimens (80%)
- <20kg paediatrics on LPV/r based regimens
  - Shift planned to DTG 10
- >20kg on DTG based regimens
Budget and ARV Procurements 2021/22

<table>
<thead>
<tr>
<th></th>
<th>2021/22</th>
<th>2022/23</th>
<th>2023/24</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSA-LTA</td>
<td>$39,465,086.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GF-PPM</td>
<td></td>
<td>$441,300.74</td>
<td></td>
</tr>
<tr>
<td>EPSA-Spot</td>
<td></td>
<td>$1,111,200.28</td>
<td></td>
</tr>
<tr>
<td>GHSC-PSM</td>
<td></td>
<td>$384,000.00</td>
<td></td>
</tr>
</tbody>
</table>

$40,555,115.75  $42,031,279.90  $39,210,922.30
Current ARV Procurement in Weight

- TLD: 4.5%
- AZT/3TC Adult: 9.3%
- TDF/3TC: 10.4%
- ABC300: 61.7%
- LPV/r: 6.8%
- ABC/3TC 120/60: 6.8%
LTA Experience

• EPSA has conducted a three years long term agreement for selected ARVs with a contract end of November-2021
  • Review of suppliers performance
  • Best experience, challenges and lessons learnt from LTA

- Efficiency
- Reduction on workload
- Communication & Supplier responsiveness
- Lead time
- Possibility of price adjustment

- Restriction on the entry of new suppliers to the market
- Late contract termination
- COVID-19 Impact
- Consumption change
Planned Activities

- New long term framework agreement contract for ARVs for 2022-2025
- Introduction of e-GP
- Continuing suppliers performance review
- Enhancing suppliers’ relationship management
- Supplier and commodity positioning
- Country specific ARV suppliers forum
thank you
UNDP Procurement update

Annual ARV Buyer Seller Summit

ZAFAR YULDASHEV,
Procurement Specialist, GF HIST, Copenhagen

13 October 2021
Denmark
UNDP Portfolio Overview

UNDP Global Health Procurement and Supply Chain Management Overview

US$ 304.1 Million 2020 Health Procurement Expenditure Delivered

40+ Countries Health Procurement Support and Advisory

100+ Countries COVID-19 Emergency procurement support
ARV VOLUMES

Total value ARVs $129,684,800

2018

Total value ARVs $35,584,616.94

2020

Estimated value of contract - $95,000,000

2021

Projection - $100,000,000

2022

Top 5 Countries by value (ARVs)

- Zimbabwe: $57.8M
- Angola: $15.4M
- Burundi: $6.5M
- Uzbekistan: $4.3M
- South Sudan: $2.8M

Top 5 ARV Products 2019

- TLD: $44.5M
- ATV/RTV: $9.4M
- 3TC/AZT: $5.4M
- ABC/3TC: $5.3M
- TLE: $4.9M

Top 5 ARV Products 2020

- TLD: $14.3M
- ATV/RTV: $4.7M
- LPV/r: $2.1M
- ABC/3TC: $1.9M
- DTG: $1.8M
Planning and consolidation

Stage 1
- Quantification exercise at country level

Stage 2
- Health Product management tool (GF) development

Stage 3
- Health Procurement Action Plan development
- Review by PSM team

Stage 4
- Consolidation and analysis central level
- Quarterly tenders
Optimizations

- Centralized Procurement of key categories (consolidation and execution)
- Quarterly tenders for all product categories (# tenders, fixed schedules, predictability, better prices etc).
- Quarterly calls with LTA holders (feedback, KPI)
- Online delivery tracking
Challenges

• Longer lead times - availability of containers (MMD)
• Timely pick up of ARVs (e.g. GL, custom clearance)
• Delays of delivery due to shortage of API / QC test results
• Share quarterly forecasts
• Issuance of POs (availability funds)
• Ad-hoc requests to prevent stock out situations
• Non consistent inclusion data loggers in all shipments
• Payment process for “sanctioned” countries
Sustainable Procurement Index for Health
What is the SPIH?

• This is as a globally established, recognized and adaptable measurement tool for policy makers, manufacturers, suppliers, procurers, and healthcare facilities end users.

• This tool provides incentives for partners to improve their environmental and social sustainability record.

• It comprehensively monitor (I) Greenhouse gas emissions, (II) resource depletion (water, energy and material consumption), (III) chemical/toxic impact on human health and the environment, and (IV) human, labour rights and gender equality."
Who is the SPIH for?

**Suppliers** – complete the appropriate SPIH Tool (general or pharmaceutical) for the product selected

**Buyers/Procurers** – review the SPIH tool completed by a supplier for the product selected.

**Wholesalers:** who operate as both a buyer and supplier and may be required to answer the SPIH, or could ask their suppliers to do the same.

**UN and Non-Government Organisations (non-buyer role):** Provide the evidence to support robust policy positions

**Regulatory agencies and policy makers:** Set top-level policy on sustainability

**Research bodies:** who could support best practice, provide new ideas and innovations at both company and product level; provide knowledge transfer to the market; &

**Other standards bodies:** develop robust standards/guidance that helps achieve specific goals; develop products that support standards users in achieving their goals; provide an independent view and rigor in demonstrating performance.
What does it Measure: Key theme areas

GHG Emissions
- Governance
- Measurement
- Target setting
- Supply chain issues

Resources Depletion
- Governance
- Manufacturing
- Supply chain issues

Chemicals and Toxicity
- Management
- Restricted substances
- Disclosure

Social Dimensions
- Policy and governance
- Audits
- Equality issues

For more information, please visit https://savinglivesustainably.org/
List of products covered by LTAs

<table>
<thead>
<tr>
<th>Product description</th>
<th>Strength</th>
<th>Dosage form</th>
<th>Type of packaging*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abacavir</td>
<td>300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Abacavir/Lamivudine</td>
<td>600 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Atazanavir/Ritonavir</td>
<td>300 mg + 100 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Darunavir</td>
<td>600 mg</td>
<td>Tablets</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Dolutegravir/Lamivudine/Tenofovir fumarate</td>
<td>50mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Dolutegravir/Lamivudine/Tenofovir fumarate - cartoon less**</td>
<td>50mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Dolutegravir/Lamivudine/Tenofovir fumarate</td>
<td>50mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Dolutegravir/Lamivudine/Tenofovir fumarate - cartoon less**</td>
<td>50mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Dolutegravir</td>
<td>50 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Darunavir/Ritonavir</td>
<td>400 mg + 50 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Darunavir/Ritonavir</td>
<td>400 mg + 50 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 120</td>
</tr>
<tr>
<td>Efavirenz</td>
<td>600 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Efavirenz/Emtricitabine/Tenofovir disoproxyl fumarate</td>
<td>600 mg + 200 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Efavirenz/Emtricitabine/Tenofovir disoproxyl fumarate</td>
<td>600 mg + 200 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate</td>
<td>400mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate - cartoon less*</td>
<td>400mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate - cartoon less*</td>
<td>400mg+300mg+300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate</td>
<td>600 mg + 300 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate - cartoon less*</td>
<td>600 mg + 300 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Efavirenz/Lamivudine/Tenofovir disoproxyl fumarate - cartoon less</td>
<td>600 mg + 300 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 90</td>
</tr>
<tr>
<td>Emtricitabine/Tenofovir disoproxyl fumarate</td>
<td>200 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Lamivudine</td>
<td>150 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Lamivudine/Nevirapine/Zidovudine</td>
<td>150 mg + 200 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Lamivudine/Tenofovir disoproxyl fumarate</td>
<td>300 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Lamivudine/Zidovudine</td>
<td>150 mg + 300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Lopinavir/Ritonavir*</td>
<td>200 mg + 50 mg</td>
<td>Tablet (heat stable)</td>
<td>Bottle HDPE: 120</td>
</tr>
<tr>
<td>Nevirapine</td>
<td>200 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Raltegravir</td>
<td>400 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 60</td>
</tr>
<tr>
<td>Ritonavir</td>
<td>100 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Tenofovir disoproxyl fumarate</td>
<td>300 mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
<tr>
<td>Abacavir/Dolutegravir/Lamivudine</td>
<td>600 mg + 50 mg + 300mg</td>
<td>Tablet</td>
<td>Bottle HDPE: 30</td>
</tr>
</tbody>
</table>
THANK YOU!!!

zafar.yuldashev@undp.org

UNDP Global Fund Health Implementation Support Team
Transforming Rwanda Medical Supply Chain Activity: Partnering with a local, commercial supply chain operator

Annual ARV Summit, October 2021

Dessalegn Tesfaye, Sr. Supply Chain Advisor, USAID/Rwanda, email: dtesfaye@usaid.gov
Outline of Presentation

• Introduction to the Rwanda Medical Supply Ltd (RMS) & Transforming Rwanda Medical Supply Chain (TRMS).

• Objectives of TRMS activity

• USAID/Rwanda Local Supply Chain Partner Transition strategies

• Milestones of transitioning procurement services to local partner (RMS)

• Lessons learned
TRMS Contract Signing Event
Objectives of Transforming Rwanda Medical Supply Chain Activity

1. **Strengthen** planning and management capabilities to support the transition from a national commercial parastatal towards a self-reliant, private sector supply chain organization.

2. Improve operational efficiencies through the application of **global industry standards for procurement, warehousing and in-country distribution**.

3. Improve Supply Chain **Data Quality and Use for Decision Making** at all levels to **optimize supply and improve order fill rates**.
USAID/Rwanda transition strategies

USAID/Rwanda used a stepwise approach. Including

- Support national reforms to create commercial supply chain operator - RMS
- Two prong approach @ RMS (a) receive TA through PSM and/or NextGen and (b) key personnel implement/manage the USAID/TRMS activity
- Innovative contracting with broad umbrella instrument with defined task orders
- Start with focus on a single program area and commodities (HIV/AIDS)
- Start with programs and commodities that RMS has experience procuring
- Involve all stakeholders especially the GFATM, GOR and USAID’s implementing partners
Milestones for Expanding Range of Commodities

- Year 5: HIV, Malaria, MCH and FP
- Year 4: HIV, TPT, and Malaria
- Year 3: HIV and Malaria
- Year 2: ARVs & VMMC
- Year 1: TLD90
**Initial Lessons Learned**

Some of the lessons that may help other countries to consider in the planning are as follows:

**Step 1:** check the capability of the local partner(a) that it has functional capacity, and (b) that it can modify its procurement manuels & financial management systems. Document it.

**Step 2:** involve all stakeholders in the planning (internal, GFATM, govt, partners, private sector, and FBO)

**Step 3:** use & actively engage USAID/W available resources on QA/QC, ADS 312, other experiences

**Step 4:** design a feasible contract and identify all the resources to implement it

**Step 5:** manage expectations, collect regular data through Third Party Monitoring, and adopt a stepwise approach

Rwanda is implementing its transition plan to local partners and such forums are important to share sourcing and marketing of ARVs.
USAID/Uganda - HIV Commodity procurement for the PNFP Sector

Presented by:
Suzan Nakawunde, USAID/Uganda, PMS-Health Commodities
Presentation Outline

- Background to local partner transitions
- Procurement transitions in Uganda
- New Local procurement Agents
- Risk Management
- Collaboration with other key players
Engaging a Diversified Ugandan Partner Base for Local Transition

Uganda Local Partner Transition

27 awards and counting

- Community-serving organizations
- Private, for-profit supply chain
- Private-not-for-profit (PNFP) service delivery
- Public sector supply chain
- Public sector support
- G2G with regional referral hospitals
Procurement transitions in Uganda

• Commodity procurement IDIQ is implemented progressively.

• Emphasis on building the capacity of local partners

• Preparing host government to take over

YR1 (25%) COP20 $8.6M
YR2 (50%) COP21 $30M
YR3 (75%) COP22 TBD
YR4 (100%) COP23 TBD
YR5 (100%) COP24 TBD

GOU
Uganda’s new Procurement Agents

- The Request for Proposals (RFP) resulted in two successful IDIQ Offerors:
  1) Joint Medical Stores (JMS) and
  2) Medical Access Uganda Limited (MAUL) to procure 5 categories of HIV commodities
- IDIQ TEC $294M over 5 years

- Year One, TOI implemented by Joint Medical Stores
  1st line ARV - TLD 90 packs 298,000 packs
  2nd line ARV - ALD 30 packs 142,000 packs
Risk Management

- **Phased transition** to local agents away from the centrally managed mechanisms.

- Competitive process at the task order level.

- IDIQ holders partnered with International Organizations for capacity building and better understanding of USAID policies.

- IDIQ holders are required to work with the GHSC/QA-FHI360 to guarantee quality of products.

- Task Order have included **Payment Milestones**.
Collaborating with Other Key Stakeholders

- Nationally:
  a) Ministry of Health
  b) USG Above site Supply chain partner
  c) National Drug Authority – Pharmacovigilance issues

- Other donors e.g. Global Fund/UNITAID/CHAI

- GHSC-PSM/RTK – align deliveries/sharing of experiences

- GHSC-QA – Quality Issues

- Last mile delivery through a 3PL – transportation to Service Delivery Points

- Regional Service Delivery Partners – consumption trends
Thank you
PEPFAR Priorities for COP 2022

S/GAC Katy Godfrey
S/GAC Hilary Wolf
S/GAC Sara Klucking
S/GAC Kanjinga Kakanda

October 14, 2021
Agenda

- Priorities for Adult Treatment
- Priorities for Pediatric Treatment
- Priorities for Prevention
- Priorities for Tuberculosis Preventive Treatment (TPT)
Priorities for Adult Treatment

S/GAC Katy Godfrey

October 14, 2021
Major themes

• Dolutegravir as both first-and second line therapy
• Differentiated service delivery and multimonth dispensing
• Focus on lifespan and healthspan
  • Advanced disease
  • Aging cohort.
Dolutegravir for suppressed individuals

- TLD as the preferred option for ART for both first and second line treatment (for all PLHIV >=30kg including adolescents and pregnant and breast feeding women)
- Complete scale up of DTG to all individuals including those suppressed on PI and NNRTI based regimens
- Weight gain documented in multiple studies, I
  - AFRICOS was clinically small but statistically significant
  - Likely multifactorial
- Drug drug interactions:
  - Rifampin requires extra dose
  - EFV/PIs-requires extra dose
  - Metformin: significantly increased metformin exposure
  - Prenatal vitamins, Ca++ containing antacids- dose spacing
Approach to non suppression: any \( \text{vl} > 50 \text{ c/ml} \)

- Currently on TLE, protease inhibitor-containing regimen, or any other non DTG-containing regimen
  - Switch to TLD*
    - Check VL in 3-6 months after regimen switch
      - If VL \( \geq 50 \text{ c/ml} \) or above the limit of detection of the assay:
        - clinical encounter and VL check in 3 months.
        - provide interventions addressing barriers to treatment.
      - Consider PI-based*** regimen if virological failure (two subsequent viral loads \( \geq 1000 \text{ c/ml} \)) one year after first VL \( \geq 50 \text{ on TLD} \)
  - Currently on TLD
    - Check VL as per the planned schedule**
      - If VL \( \leq 50 \text{ c/ml} \) (or below the limit of detection), continue to provide package of interventions (TPT, MMD etc.)

* Patients receiving MMD should continue without interruption.
**WHO 2021 guidelines recommend VL to be checked 6 months after ART initiation, 12 months after ART initiation and yearly thereafter.
***ATV/r or DRV/r-based regimens preferred
DTG for unsuppressed individuals

- Viral failure: 2 consecutive VL > 1000 c/ml
- Viral non-suppression: Any measurable viral load above 50 copies/ml (or above the limit of detection of the test used).
- Low level viremia: Repeated viral loads that are measurable but under 1000 c/ml
Differentiated Service delivery and multimonth dispensing

- Separation of drug delivery and clinical care
- All individuals should get 3 months, preferably 6 months of drug
- Decentralized delivery-using other pick-up points besides clinic pharmacy
- Delivery of other required meds including ARVs
  - HIV related eg Cotrimoxasole, TPT
MMD coverage is high but growth has slowed.

3-5MMD coverage remained at 49% in Q3; 6MMD coverage increased to 24%.

% of clients on 6MMD has increased 3-fold from FY20 Q1.
Q3 was the first quarter PEPFAR increased 3+MMD coverage since FY20. This is likely due to the increase in MMD reporting completeness and 6MMD coverage. In total, nearly 10M individuals on ART are receiving at least 3MMD.
Comments

• COVID adaptation that is here to stay
• May have reached saturation
• Ordering patterns have changed; more stock required in country
Focus on mortality-advanced disease

Persistent problem for PEPFAR

Individuals presenting late, or representing to care

Interventions are life saving:
- TPT
- Diagnose and treat cryptococcal disease
- Cotrimoxazole
Cryptococcal disease

- Preemptive treatment: CrAg + but LP negative: Fluconazole
- Meningitis treatment: AmB with flucytosine preferred, followed by fluconazole
  - New study showing efficacy of a single dose of liposomal AmB plus flucytosine
  - Should that become part of WHO guidance, PEPFAR will consider.

Flucytosine is biggest challenge
Focus on Mortality: Aging

18 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS
Aging and comorbidities—high burden of disease—AFRICOS

David Chang, Conf on HIV and Aging 2021

Non-Communicable Diseases (NCD) At Most Recent Visit

- GFR <60
- Dysglycemia
- Elevated BP
- BMI >30

NCD prevalence positively associated with age; BMI reduced in PLWH compared to those w/o HIV (age >50)
Client centered care

- PEPFAR does not support screening and treatment of co-morbid disease
- Can support delivery of medicines for older individuals if relevant.
Priorities for Pediatric Treatment

S/GAC Hilary Wolf

October 14, 2021
PEPFAR Treatment Cascade for CLHIV <15

<table>
<thead>
<tr>
<th>OUI</th>
<th>Age 2019</th>
<th>Sex.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(48)</td>
<td>&lt;01, 01-04, 05-09, 10-14</td>
<td>(All)</td>
</tr>
</tbody>
</table>

### 1st 90

- HTS_TST: 3,242,710
- HTS_TST_POS: 75,902

### 2nd 90

- HTS_TST_POS: 76,416
- TX_NEW: 76,416

### 3rd 90

- TX_CURR: 667,318
- TX_PVLS D: 590,038
- TX_PVLS N: 418,601

---

18 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS
ALL CLHIV should undergo single substitution to DTG as soon as DTG is available in country

DTG 10 mg dispersible tablets manufactured by Macleods

(Photo Credit: CY Malati. 2021)
• USG, through PEPFAR, expects that all countries will transition all CLHIV onto a DTG-based regimen as quickly as possible; full implementation should be completed or at least well underway in COP21

• Detailed supply planning is extremely important to achieve a prompt transition and help ensure the roll out of DTG is not hindered by over-supply of pediatric LPV/r

• New orders for LPV/r will be highly scrutinized to ensure procurement is limited to quantities needed for alternative treatment only (expect to be <10% of CLHIV)
Clinical recommendations for transition to DTG based regimen

- Rapid programmatic transition to DTG-based regimens for ALL children (at least 4 weeks old and 3kg) new to ART and established on ART irrespective of their current regimen.

- Single switch can and should occur irrespective of the availability of a VL test/result or the value of the latest VL result

- Important to maintain or optimize children on an ABC/3TC backbone

- Patients previously receiving MMD should continue on MMD when the switching to DTG
Pediatric MMD guidance in the setting of COVID-19

- Programs should make every effort to supply children and CLHIV/ALHIV initiating and refilling ART with a 3-month supply of ARVs for those 2 - < 5 yo and a 6-month supply for those > 5 yo.
- For children requiring Cotrimoxazole, a 3-6-month supply should be provided at the same time as ARV pickup.
- For children starting a new medication, administration of the first dose should be demonstrated and administered in clinic.
- HIV-exposed infants should be given the greatest quantity of infant prophylaxis, both ART and cotrimoxazole as possible to last until the next immunization or EID testing appointment.
MMD for CLHIV<15 in Q3 (April 2021-June 2021) by country

<table>
<thead>
<tr>
<th>Country</th>
<th>All Sexes</th>
<th>&lt;15</th>
<th>Not on MMD</th>
<th>3 to 5 months</th>
<th>6 or more months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>7,473</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eswatini</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>4,867</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haiti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>45,272</td>
<td>19,378</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesotho</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>35,190</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
<td>33,711</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Namibia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>6,697</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>11,749</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Africa Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Hemisphere Region</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Priorities for Prevention

S/GAC Sara Klucking

October 14, 2021
PrEP Use Trends are Encouraging

For FY 2021, PEPFAR set an ambitious goal to provide PrEP to >1,000,000 people at substantial risk of acquiring HIV

- 9 out of 26 OUs >=75% achievement
- 9 out of 26 OUs < 50% achievement
- 25 out of 26 >=100% of last year’s annual total at this 3/4 point this year
OUs are scaling up PrEP across PEPFAR

- > One million on PrEP
- PrEP scale-up continues in COP 21 and onward
- PrEP continuation research is ongoing
- Guidance is encouraging multi-month dispensing of oral PrEP
- PEPFAR continues to evaluate the expansion of the product pipeline into the PEPFAR prevention programs
Approved products included in the WHO guidelines for PrEP

ORAL TABLET, DAILY
- Emtricitabine/Tenofovir DF (TDF/FTC) 200/300 mg Tablet, 30 Tablets
- Lamivudine/Tenofovir DF (TDF/3TC) 300/300 mg Tablet, 30 Tablets
- Tenofovir 300 mg Tablets, 30 Tablets

VAGINAL, MONTHLY
- Dapivirine Vaginal Ring
  - Sole Source Manufacturing
  - New to product commercialization
LONG ACTING, VARIED ADMIN

- Long Acting Injectable Cabotegravir
  - One dose intramuscularly every two months
- Islatravir
  - Oral tablet, monthly tablet
- Lenacapavir
  - Twice yearly injection

ORAL TABLET, DAILY

- Dual Prevention Pill for HIV and Pregnancy Prevention
  - Tenofovir Disoproxil Fumarate (TDF 300 mg), Emtricitabine (FTC 200 mg), Levonorgestrel (LEVO 0.15 mg) Ethinyl Estradiol (EE 0.03 mg), Fixed Dose
  - Combination Tablet, 28 Tablets 21 tablets of TDF/FTC/LEVO/EE and 7 tablets of TDF/FTC
Priorities for Tuberculosis Preventive Treatment (TPT)

S/GAC Bill Paul / Kanjinga Kakanda

October 14, 2021
TPT Scale-up Progress Across PEPFAR countries

- Ambitious targets set for full TPT coverage across PEPFAR countries since 2018
- More than 6.9 million have completed TPT since 2017 (about 40% of the current estimated TX_CURR)
- Performance in 9 highest volume OUs (>500,000 patients) accounting for 82% of PLHIV on ART:
  - 5 OUs have >50% TPT coverage
  - 2 OUs have >25% coverage
  - 2 OUs achieved <20%

<table>
<thead>
<tr>
<th>Year</th>
<th>TPT Targets</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>1,900,000</td>
<td>797,418</td>
</tr>
<tr>
<td>FY19</td>
<td>2,800,000</td>
<td>1,393,965</td>
</tr>
<tr>
<td>FY20</td>
<td>6,300,000</td>
<td>2,661,128</td>
</tr>
<tr>
<td>FY21</td>
<td>6,686,627</td>
<td>1,360,802* (semi-annual results)</td>
</tr>
</tbody>
</table>
Global Results for TPT coverage – Q2FY17 to Q2FY21

- Massive TPT scale-up observed from Q4 2019
- Upward trend sustained
- 57% of TPT results accomplished in the last 3 reporting periods
- Increased number TPT results maintained in 2020 despite COVID-19
Service Continuity in COVID-19 Context

• COVID-19 innovations included rapid integration of TPT and TB treatment for PLHIV into existing DSD models, harmonized MMD for ARVs and TPT, TPT expansion in DDD (community sites, private facilities and pharmacies)

• Program adaptations resulted in great volume in TPT completion despite disruptions due to COVID-19,
  ▪ Nigeria - 56% of cumulative TPT coverage occurred in the last 3 quarters as a result of massive TPT initiation with completion over 90%
  ▪ Tanzania - impressive overall TPT scale with ~80% patients covered with a course of TPT (completion rate maintained at/or above 85% for the last 2 years)
Recent TPT initiation/ Q4FY20 and completion/Q2FY21 (highest volume OUs) Results

Maintaining strong TPT initiation

Great completion rates for 6 of the 9 high volume OUs
Looking Forward

- PEPFAR committed to treating all eligible PLHIV with TPT, and reaching full TPT coverage by FY22
- TPT commodity availability is critical to respond to scale-up demand, and sustain MMD and DDD models being implemented
- Highlights from the recently published WHIP3TB study’s results:
  - 3 months weekly of Rifapentine and Isoniazid (3HP) had higher TPT completion than daily isoniazid
  - No additional benefits (i.e., further reduction in TB incidence) from a second round of TPT
- Focus on shorter, Rifapentine based regimen (3HP, 1HP when available on the market)
  PEPFAR preferred TPT regimen is 3HP (Uptake for shorter regimen has been slower than anticipated in PEPFAR OUs due to various reasons, including COVID-19 related)
- TPT provision for child <5 yo contacts of PLHIV with TB remains a priority, but still a huge gap in uptake (child-friendly formulation needed)
Thank You!

PEPFAR
U.S. President’s Emergency Plan for AIDS Relief

18 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS
GHSC-PSM Reflections and Outlook for ARV Supply Chains

Alan Pringle, GHSC-PSM Supply Chain Director
October 2021

Link to live presentation
GHSC-PSM ARV COP20
Snapshot Summary

- 34% Delivered by Sea
  Increase of 7%

- 91% Avg Overall Supplier Performance Score
  Inclusive of all scorecard metrics (e.g., OTP, incidents, GS1, qualitative factors)

- MMD likely saved 59 million pharmacy trips for PLHIV*

- $405M ARVs Procured
  93% OTD / 88% OTIF
  89% / 84% COVID Impact
  Over last 4 quarters

- ARVs Delivered to 32 Countries

- 7% Pediatric ARV Spend
  Representing 39% processed line items

- 32% of Orders Fulfilled from the RDC
  8 unique products

Data as of August 2021
*Life of project through June 2021
PEPFAR Countries were Encouraged to Accelerate Orders in 2020 to Offset COVID-Related Supply Chain Risks

Order Placement Date: Date PO is released to vendors. Includes orders for both Direct Drop and for the RDCs.

Data as of August 2021
Adoption of Global Standards for Product Identification, Data Capture and Master Data Exchange

GS1-based product and location identifiers (GTINs & GLNs) and product master data exchanged via GDSN supports the population of the GHSC-PSM catalog. In turn, catalog data is used for supply chain processes from procurement to logistics.

As countries progress toward using standards-based identifiers and labelling to support in-country operational activities and product traceability, GHSC-PSM is receiving increasing requests to provide GTIN data and confirm presence of product labelling to support those activities.

Through advancing the adoption of standards-based identifiers and serialization GHSC-PSM continues to work towards increased supply chain visibility and traceability.
ARV GHSC-PSM Global Standards Requirement Compliance from October 2020 to September 2021

- **Phase 1**: Assignment of GTINs, GLNS, and labeling applied on tertiary packaging
  - 84% in 2020, 97% in 2021

- **Phase 2**: Exchange of product master data via GDSN
  - 47% in 2020, 85% in 2021

- **Phase 3**: Labeling applied on secondary trade item packaging
  - 78% in 2020, 100% in 2021

- **Phase 4**: SSCC applied to logistics unit and serialization applied to trade items
  - 76% in 2020, 90% in 2021
Evolving GHSC-PSM’s Procurement Strategy

GHSC-PSM ARV Landscape

- Catalog Consolidation
- Acceleration of MMD
- Increased Supply Chain Flexibility
- Strong Supplier Performance

Differentiators

- Extended Shelf-life
- Price
- Packaging Efficiencies
- E2E Visibility
- Increased PSE In-country (e.g., DAP, VMX)
Thank you!
ARV Large Buyer Seller Summit

Republic of South Africa

Ms Khadija Jamaloodien
Affordable Medicines Directorate

ARV Large Buyer Seller Summit
October 2021
We expect continued patient growth in SA

PLHIV will surpass 8m in 2021, and SA still retains its aim to grow TROA to 6m

Note
- TROA = Total remaining on ART
- TROA data on graph excludes private sector
- PLHIV from Thembisa 4.4 model
ARV availability maintained >90% apart from short period over COVID 1st Wave

**Note**
- TROA = Total remaining on ART
- TROA data on graph excludes private sector
- PLHIV from Thembisa 4.4 model

---

ARV Availability

<table>
<thead>
<tr>
<th>Month</th>
<th>ARV Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-19</td>
<td>90-95%</td>
</tr>
<tr>
<td>Nov-19</td>
<td>90-95%</td>
</tr>
<tr>
<td>Dec-19</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jan-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Feb-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Mar-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Apr-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>May-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jun-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jul-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Aug-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Sep-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Oct-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Nov-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Dec-20</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jan-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Feb-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Mar-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Apr-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>May-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jun-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Jul-21</td>
<td>90-95%</td>
</tr>
<tr>
<td>Aug-21</td>
<td>90-95%</td>
</tr>
</tbody>
</table>

90% target
ARV Tender

- Current tender expires on 30 June 2022
- New tender for 3 year period from Jul-22 to Jun-25
- Bids have been received
- Evaluation underway
- Targeting announcement of award in Feb-22
- AMD will work with suppliers on transition
Transition to dolutegravir based regimens

South Africa has ~3m patients on TLD

- Steady increase seen over the year, with estimates of TLD:TEE at approximately 66:34
- Messaging from NDoH has attempted to support the transition
  - Confirmation of ample stock cover for TLD
  - Letter from HIV Programme supporting accelerated transition
  - Dolutegravir based treatment now accessible by all women
  - 2nd line patient transition also encouraged
- DTG50 demand has increased recently and is being monitored to assess uptake

CCMDD: Tenofovir & Lamivudine & Dolutegravir (TLD) - Patient Registration or Transition Standard Operating Procedure

[Logo of Republic of South Africa Department of Health]
Adults on main 1st line ARTs; 80:20 will not be reached in 2021

Source: Team analysis; TEE/TLD profile based on TROA reaching 6m in Mar-22
### Regimen trends: 2<sup>nd</sup> line adults

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Patient estimate</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZT/3TC+LPV/r</td>
<td>~280,000</td>
<td>LPV/r volumes expected to reduce, but based on clinician adherence to communication from HIV Programme on 2&lt;sup&gt;nd&lt;/sup&gt; line patient transition to DTG 50</td>
</tr>
<tr>
<td>AZT/3TC+DTG</td>
<td>~50,000</td>
<td></td>
</tr>
<tr>
<td>AZT/3TC+ATV/r</td>
<td>~10,000</td>
<td></td>
</tr>
<tr>
<td>TDF/FTC+LPV/r</td>
<td>~6,000</td>
<td>Stable volumes expected</td>
</tr>
<tr>
<td>TDF/FTC+ATV/r</td>
<td>~250</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>~320,000</td>
<td></td>
</tr>
</tbody>
</table>
### Regimen trend: 1st line children

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Patient estimate</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC/3TC+EFV</td>
<td>~90,000</td>
<td>Expectation that EFV &amp; LPV/r will be replaced by DTG 50</td>
</tr>
<tr>
<td>ABC/3TC+LPV/r</td>
<td>~45,000</td>
<td></td>
</tr>
<tr>
<td>ABC/3TC+DTG</td>
<td>~2,000</td>
<td></td>
</tr>
<tr>
<td>AZT/3TC+NVP</td>
<td>~6,000</td>
<td>Stable volumes expected</td>
</tr>
<tr>
<td>ABC/3TC+ATV+r</td>
<td>~3,000</td>
<td>ATV/r combination available but not on contract in current tender</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>~160,000</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

• Tender evaluation underway
• South Africa will continue to have a demand for TEE600
• Transition of 2\textsuperscript{nd} line patients does carry uncertainty
• We hope 2022 will be a better year for all – but plan for surprises

\textit{Looking forward to a successful tender outcome, with stronger relationships and continued innovation for the benefit of our patients}
THANK YOU
ARV Large Buyers and Sellers Forum 2021
Global Fund Update

13-14 October 2021
Key contacts here today

Cathal Meere
Manager, Pharmaceuticals
Strategic Sourcing

Chirag Rajpuria
Associate Specialist,
Principal Recipient Services

Uranchimeg Badarch
Category Lead, ARVs
Strategic Sourcing
The Global Fund supports countries to fight HIV, TB & Malaria, & mitigate COVID 19 impact

$4.2 billion spend in 2020, 105 countries and 14 multi-country programs

**HIV in 2020:**
- 21.9 million people on antiretroviral therapy for HIV. Coverage increased from 48% in 2015 to 73% in 2020. Global target: 95% by 2025.
- 104 million HIV tests taken; HIV-positive people with knowledge of their status increased from 69% in 2015 to 84% in 2020. Global target: 95% by 2025
- People living with HIV with suppressed viral load increased 41% in 2015 to 66% in 2020. Global target: 95% by 2025.
- 686,000 HIV-positive mothers received medicine to keep them alive and prevent transmitting HIV to their babies in 2020; coverage increased from 44% in 2010 to 85% in 2020. Global target: 100% by 2025.

**Malaria in 2020:**
- 188 million mosquito nets were distributed
- 11.5 million pregnant women received preventative therapy, 135 million cases of malaria treated
- 248 million suspected cases tested for malaria.

**TB in 2020:**
- 4.7 million people received lifesaving treatment for TB in 2020.
- GF provides 77% of all international financing for TB by June 2021 and invested 7.8B USD in TB programs.
- 30% of the GF TB investments support interventions on TB care and prevention, particularly for children and other vulnerable groups such as people living with HIV; 271,000 HIV positive TB patients were on ART during TB treatment in 2020

**Covid Tx Products**
- Covid-19 Response Mechanism (C19RM) provided US$4 billion to date for 107 countries and 16 multi-country programs on protective equipment (PPE), diagnostic tests, and therapeutics (including medical oxygen), to support country responses to Covid-19
Key ARV achievements in 2021

Supply Continuity:
• Continue to drive value through strategic sourcing, H1 2021 ARVs spend alone 400mUSD.
• Price reductions for 1st line regimen by 9% in 2021 compared to 2020 (27% reduction since implementation of the FA 2018-2021)

Demand Forecasting:
• Continued improvement of demand forecasting: COVID-19 acted as function for the GF to help shape demand, mandating the PRs to place annual orders by Jun 2021. All forecasted orders have been placed for 2021
• Number of Rapid Supply Mechanism (RSM) orders went down significantly from 21 ARV orders in 2020 to zero orders as of Sep end 2021.

Continues Partner collaboration
• Continued close working relationship with our key partners including PAHO, UNITAID, CHAI & USAID/PEPFAR

Innovation:
• Supporting efforts to stimulate innovation; accelerate the adoption of new and/or cost-effective products & introduction of better formulations for children-dispersible tabs (DTG 10mg)
• Supply carton-less products -96% of the 1st line ARVs supplied as of Q3 2021.
2021 supplier performance at the end of Q3

TGF ARV Strategy includes active supplier performance management with a greater focus on

- Supply security
- OTIF (on-time-in-full delivery) - Target of 90%
- Shorter lead-times
- Shelf-life extension
- Vendor Managed Inventory (VMI) stock visibility for low volume products, mitigate risk of stock-outs

Supplier OTIF (on-time-in-full delivery) with target 90%
2021 (Q1 – Q3)

![Bar chart showing supplier OTIF performance with target 90%]

Delayed Order 2021

![Bar chart showing delayed orders across Q1, Q2, and Q3]

- Q1 2021 (212 POs): 8% delayed orders, 8% share of delayed orders
- Q2 2021 (290 POs): 3% delayed orders, 3% share of delayed orders
- Q3 2021 (200 POs): 8% delayed orders, 8% share of delayed orders
75 million monthly ARV* packs estimated for 2022 delivery through GF Pooled Procurement Mechanism

More than 96% tenofovir-based FDCs = carton less for POs placed in 2021

*more detailed forecast for 2022 will be published in November 2021

Armenia, Belarus, Benin, Bhutan, Burkina Faso, Cambodia, Cote d’Ivoire, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Congo DRC, Ecuador, Gambia, Georgia, Ghana, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Indonesia, Jamaica, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mongolia, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Philippines, Sao Tome and Principe, Senegal, Sierra Leone, Sri Lanka, Syrian Arab Republic, Eswatini, Tanzania, Thailand, Timor-Leste, Togo, Uganda, Vietnam, Yemen, Zambia
Looking Ahead: 2022 Global Fund focus areas

Supply continuity:
- Ensuring continued supply & long-term sustainability for strategic medicines and medicines for HIV program
- More focus on upstream supply visibility, support new entrants, diversify supplier base
- Accelerate transition to more optimal health products, smoothen new product uptake

Facilitate collaboration:
- Between key partners & suppliers to balance supply & demand, drive stronger health product management across all procurement channels with end-to-end integrated tools and improved demand forecasting

Leverage supply synergies:
- Combined tender for ARV, anti-malaria medicines and other strategic medicines in 2022

Innovation:
- Continue supporting efforts to stimulate innovation
- Accelerate the adoption of new and/or cost-effective products,
- Adequate preparation and planning to respond to new product
- Reduce environmental footprint and improve traceability
- Supply of 2nd line ARVs with no carton (reduce packaging and shipping cost), implementation of the GS 1 barcoding (improve tracking of products and quality incidents throughout supply chain)
Global Fund Combined Pharmaceutical Tender

- New tender will combine both ARV’s and ANTM categories
- Initial tender timing postponed due to COVID-19 impact on global supply network
- Supplier and partner consultation completed in Q1-Q2 2021
- New tender implementation in 2022
Sourcing & Management of Health Products

Overview
Updates
Market Shaping Strategy
Procurement Tools

Health Product Procurement
- Antimalarial Medicines
- Antiretrovirals

Antiretrovirals

Lifesaving antiretroviral medicines (ARVs) are vital for HIV programs and account for nearly 40% of the Global Fund's Pooled Procurement Mechanism annual spend. Our Market Shaping Strategy and our position as one of the largest global buyers of ARVs guide our commitment to facilitating healthy, balanced and sustainable markets.

4.6 million
people receiving ARV treatment procured through the pooled procurement mechanism in 2019
Thank You
PAHO Strategic Fund
Supporting Countries in Improving Access and Availability to Essential Public Health Supplies
**Vision**
Improve the health and well-being of peoples and contribute to the advancement of universal health in the Americas, by **strengthening health systems and improving the equitable access to safe, efficacious, and quality medicines and other priority public health supplies.**

**Values**
**Solidarity, quality, transparency, equity, efficiency, Pan-Americanism.**

**Mission**
Develop a regional platform for PAHO Member States that facilitates collective action to improve the **affordability, availability and quality of strategic health supplies** in the Americas.
Platform for Value Creation for Countries & Suppliers

**Access**
Timely and enough Supply

**Quality**
Safe & Effective Products meeting international standards

**Affordability**
Pooled demand and economies of scale to secure lowest prices

**Single Window**
“One place for all transactions of 42 countries and territories.”

**Access to a Sustainable Market**
“National funding, product standardization & regulatory requirements.”

**Prompt POs and Payment**
“Use of 60 days Credit Line or prepayment from countries”

Countries

Suppliers
Since July 2015, PAHO has been leveraging Global Fund long term agreements (LTAs) for procuring the majority of the ARVs purchased through the Strategic Fund.

- Vendor performance
- Supply assurance of products with low volume
- Access to products allocated to the Global Fund for emergency requests
- Best value for money

- Maximize use of LTAs: framework agreements
- Increase ARV demand visibility to secure availability
- Transition/adoption of new products: market intelligence

- Contract Supplier Management
- Harmonize Quality Standards & Quality Assurance
- Transparency in tendering process (eligibility, technical proposal & evaluation process)

Stay tuned - New joint tender scheduled in 2022 !!!
Access to ARVs through PAHO SF

22 Countries purchasing ARVs through the Strategic Fund
*between 2017/2020

Top 10 products purchased (in # tablets) 2019-2021

- TLE: 113 M
- TLD: 77 M
- TEE: 33 M
- AZT: 27 M
- TDF/FTC: 21 M
- DTG: 19 M
- LPV/r: 13 M
- 3TC/AZT: 10 M
- ABC/3TC: 8 M
- 3TC: 6 M

433 Shipments of ARVs during 2020/21 *up to September 2021
Optimization of treatment schemes for Member States

BRA excluded from the graph. The size of the ribbons represents the amount of tablets purchased. Data extracted 8/30/21
Regional Demand of ARVs 2022/23

- **01** Alignment with treatment guidelines recommended by WHO
- **02** Optimization of treatment schemes and migration plans
- **03** Epidemiological profile
- **04** Current stocks, products in transit and shelf life of products
- **05** Pharmaceutical presentations
- **06** Financial support and identification of cost saving opportunities
- **07** Possibility of loans and management of donations

16 Countries already submitted their 2022 ARV estimates
PAHO ARVs focus for 2022-25

- Increase TLD demand
- Introduce pediatric DTG
- Coformulated DRV/r
- New formulations: DTG-3TC DRV/r-TAF-FTC
- Long Acting
Global Roll out
WHO and many partners are evaluating what can be the profile for the best candidates to be rolled out with a public health approach:
- Every 3-6 months
- No requirement for cold chain
- Easy to manufacturer
- Accessible price
- Patent status

The year of new LA-ARVs
Several trials evaluating:
- SC LENACAPAVIR every 6 months as treatment
- Implant ISLATRAVIR yearly PrEP
- SC ALBUVIRTIDE weekly
- bNAb
The patents will limit the introduction of new drugs

<table>
<thead>
<tr>
<th>Country</th>
<th>DTG</th>
<th>TAF</th>
<th>Cabotegravir</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigua and Barbuda</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Bahamas</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbados</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
<td>MPP License</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Colombia</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominica</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ecuador</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guyana</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Haiti</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Nicaragua</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Panama</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Paraguay</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Peru</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Suriname</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Uruguay</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Venezuela</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patent Granted or filed
No Patent Granted or Filed

Source: Medicines Patent Pool database and World Intellectual Property (WIPO)

➢ Currently over 2.1M people living with HIV in LAC Region – and potentially 2M will be affected by the patent protection of new drugs.
Establishing supplier partnerships ...

TRUST & ENGAGEMENT

✓ Open communications
✓ Transparency and responsiveness
✓ Innovation and development of new products

VISIBILITY & RISK

✓ Demand & Supply Visibility
✓ Production visibility
✓ Performance management
✓ Risk mitigation and Impact

ADVOCATE

✓ Understanding the region - Pan-Americanism
✓ Expand access agreements in LAC
✓ Ensure compliance with regulatory requirements

Going to the next level ...
Leveraging GS1 Standards to Enhance Product Master Data Management

Rachel Smith, Global Standards Technical Specialist

September 2021
GHSC-PSM ARV Global Standards Requirements Phased Timeline

**Phase 1**
- **30 Dec 2018**
- GS1 Data Matrix or GS1-128 barcode encoded with:
  - (01) GTIN
  - (10) Batch/lot
  - (17) Expiration Date

**Phase 2**
- **30 Dec 2019**
- Homogenous Trade Item
  - GS1 Data Matrix or GS1-128 barcode also encoded with:
    - (21) Serial Number

**Phase 3**
- **30 June 2020**
- GS1 Data Matrix encoded with:
  - (01) GTIN
  - (10) Batch/lot
  - (17) Expiration Date

**Phase 4**
- **30 October 2021**
- GS1 Data Matrix also encoded with:
  - (21) Serial Number

---

**Notes:**
- For more information on how to comply: [www.1worldsync.com/customer-page/ghsc-psm](http://www.1worldsync.com/customer-page/ghsc-psm)
- For more information on requirements: [http://supplychain.org/globalstandards](http://supplychain.org/globalstandards)
What master data does GHSC-PSM collect?

- **General item information**: identifiers, brand name, product type
- **Product description**
- **Unit indicators**: base, consumer, ordering, dispatch unit indicators
- **Dimensions and weights**
- **Contact/role information**: brand owner, information provider, manufacturer
- **Pharmaceutical information**: dosage form, controlled substance, route of administration
- **Hierarchy**: parent/child items and quantities
- **Storage, handling, and shelf life**
- **Classifications**: GPC, INN, UNSPSC
- **Market authorization**: Permit numbers and dates
How GDSN Data is used by GHSC-PSM

GHSC-PSM has adopted and implemented the GDSN to receive item attribute information as the basis of the GHSC-PSM product catalog and seeks the benefits of synchronizing product data with trading partners for both new and existing items.

Using the GDSN process aims to improve supply chain data quality and management for you and all of our trading partners.

It will provide USAID-supported countries with the information they need to optimize decision making for GHSC-PSM order planning, procurement, shipping and receiving.
ARV GHSC-PSM Global Standards Requirement Compliance from October 2020 to September 2021

Percent of in-scope items compliant with phase requirements

Phase 1
Phase 2
Phase 3
Phase 4

GDSN
### Key challenges in receiving complete and accurate product master data via GDSN from ARV suppliers

<table>
<thead>
<tr>
<th>Key difference between having all product items synchronized in the GDSN and having all required attribute data completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continued education of supplier personnel caused by turnover</td>
</tr>
<tr>
<td>Specific attribute challenges (e.g. UNSPSC, INN, Market Auth, Route of Admin)</td>
</tr>
<tr>
<td>Coordination between synchronization entities</td>
</tr>
</tbody>
</table>
Multiple Educational Resources Available

**Global Standards Website:** [https://www.ghsupplychain.org/index.php/globalstandards](https://www.ghsupplychain.org/index.php/globalstandards)

<table>
<thead>
<tr>
<th>Resource</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Synchronization Implementation Guide</strong></td>
<td>Provides an overview of mandatory, required, and suggested data attributes, GDSN tags, definitions and guidance, and supporting code lists to support compliance with GHSC-PSM GDSN data exchange requirements for suppliers.</td>
</tr>
<tr>
<td><strong>GDSN Webinars</strong></td>
<td>Currently there are 6 webinars available for GDSN education</td>
</tr>
<tr>
<td><strong>GDSN Attribute Guide</strong></td>
<td>Includes examples for all attributes</td>
</tr>
<tr>
<td><strong>Learnbite tutorial videos</strong></td>
<td>• How to Interpret CIC Messages&lt;br&gt;• How to address common attribute challenges&lt;br&gt;• How 1WorldSync can assist suppliers with syncing data with GHSC-PSM?&lt;br&gt;• How to navigate 1WorldSync’s GDSN portal</td>
</tr>
</tbody>
</table>
GDSN Integration Value Proposition for the Global Fund

14 October 2021
1. Background
The Product Data Hub plays an essential role at the Global Fund in making sure that all departments speak a common language and that there is a single version of truth regarding product master data.
Entering data in the Product Data Hub

Products and Items are created and entered in the PDH manually with the appropriate workflow. Items will be defined down to GLN/GTIN combinations.

A GDSN Data Pool will be leveraged to enrich items further:
- Volumetrics
- Market Authorizations
- Parent/Child Hierarchy
We distinguish the reference Product (nomenclature item) from the version produced by a particular Manufacturer (supplier item) in a particular production site (trade item) with a particular GTIN (logistics item).

In the PDH we only created the Nomenclature Item and the Trade Item levels. The Logistics Items are defined as attributes of the Trade Item, which is the target for GDSN Data Pool enrichment.

<table>
<thead>
<tr>
<th>Product definition and pack size</th>
<th>Global Fund reference price</th>
<th>Manufacturer or PSA price</th>
<th>Shelf life</th>
<th>Country registration details</th>
<th>Stringent Regulatory Authority: Quality assurance details</th>
<th>Logistics details</th>
</tr>
</thead>
</table>
2. Why GDSN
Immediate value for the Global Fund

The Global Fund intends to leverage a GDSN Data Pool to receive “faster moving” master data from its manufacturers and stay up-to-date:

Marketing Authorizations are essential for our procurement process: when allocating an order to a manufacturer, Sourcing teams at the Global Fund take into account marketing authorizations in the destination country and select a compliant manufacturer. This information is fast-moving, and the Global Fund cannot wait for new tenders to update its files.

Principal Recipients and Supply Chain partners need information about the Logistics Items (including cases and pallets) in order to plan for proper reception and management of goods. Volumetrics as well as parent/child hierarchies are rarely discussed and captured during tenders. New items for cases will be created throughout the lifecycle of the tender and should be easily captured.
Driving adoption and access to information

The Global Fund intends to make its master data available to principal recipients and supply chain partners but believes countries should be autonomous in accessing this data.

Leveraging a GDSN Data Pool will force Manufacturers to upload relevant master data and allow Global Fund to monitor its completeness. Country organizations who interface to a GDSN Data Pool will immediately know which fields to request and be assured that the data is there.
Thank you
Global Data Synchronization Network

Presentation by
Umesh K - Senior Vice President Global Anti-virals
• Our Journey
  Implementing GDSN
• Challenges
• Learnings
GHSC PSM requested details for GDSN implementation

Subscription of GDSN service provider

Published attributes in GDSN Server

Data access to GHSC PSM & iPlus
## Challenges

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Challenges</th>
<th>Overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Data collection</td>
<td>Collating &amp; finding right data from various internal department in a phase-by-phase manner.</td>
</tr>
<tr>
<td>2.</td>
<td>Data entry</td>
<td>Entering the right data for each SKU manually and the data was cross verified twice before the submission.</td>
</tr>
<tr>
<td>3.</td>
<td>New Attributes</td>
<td>Approached 1Ws and GHSC team to learn about the attributes and published in the GDSN server</td>
</tr>
</tbody>
</table>
Learnings

Knowing All About Product Related Info & New Attributes In Depth
Understanding The GDSN Process & Managing Big Data

Avoid Duplication, Accuracy Of Information, Inefficiencies In Manual Data transfer every time can be minimised
Real Time Access Of Data Pool By Trade Partners & Buyers
Thank You
<table>
<thead>
<tr>
<th>Sl.No</th>
<th>GDSN Service Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1WorldSync Item management</td>
</tr>
<tr>
<td>2</td>
<td>A1Sync</td>
</tr>
<tr>
<td>3</td>
<td>AECOC Data Pool (GS1 Spain)</td>
</tr>
<tr>
<td>4</td>
<td>AGENA3000 (PARANGON)</td>
</tr>
<tr>
<td>5</td>
<td>Alkemics</td>
</tr>
<tr>
<td>6</td>
<td>ANCCNET (GS1 China)</td>
</tr>
<tr>
<td>7</td>
<td>atrify GmbH</td>
</tr>
<tr>
<td>8</td>
<td>BC Services - b-synced</td>
</tr>
<tr>
<td>9</td>
<td>Carrefour Group</td>
</tr>
<tr>
<td>10</td>
<td>Central Data Bank - GS1 Belgilux</td>
</tr>
<tr>
<td>11</td>
<td>Comarch EDI MDM</td>
</tr>
<tr>
<td>12</td>
<td>COMMPORT GSDS (CGS) v2.0 R1.1</td>
</tr>
<tr>
<td>13</td>
<td>CONTENTIS AG - GloLIB</td>
</tr>
<tr>
<td>14</td>
<td>Datapool atGP</td>
</tr>
<tr>
<td>15</td>
<td>E2open Global Data Pool</td>
</tr>
<tr>
<td>16</td>
<td>Easy Global Data Pool - Attribyes</td>
</tr>
<tr>
<td>17</td>
<td>Edgenet, a Syndigo company</td>
</tr>
<tr>
<td>18</td>
<td>EDICOMDATADP</td>
</tr>
<tr>
<td>19</td>
<td>EQUADIS SA</td>
</tr>
<tr>
<td>20</td>
<td>EWAY SYNCWAY</td>
</tr>
<tr>
<td>21</td>
<td>GHX Health ConneXion</td>
</tr>
<tr>
<td>22</td>
<td>Global Halal Data Pool / Serunai</td>
</tr>
<tr>
<td>23</td>
<td>Global Product Exchange - Nielsen Brandbank</td>
</tr>
<tr>
<td>24</td>
<td>GloBeCat - GS1 Croatia</td>
</tr>
<tr>
<td>25</td>
<td>GS1 Association Greece - Hellasync</td>
</tr>
<tr>
<td>26</td>
<td>GS1 Canada</td>
</tr>
<tr>
<td>27</td>
<td>GS1 Colombia LOGYCA COLABORA</td>
</tr>
<tr>
<td>28</td>
<td>GS1 Czech Republic - SYNFONY</td>
</tr>
<tr>
<td>29</td>
<td>GS1 DAS - Netherlands</td>
</tr>
<tr>
<td>30</td>
<td>GS1 Denmark</td>
</tr>
<tr>
<td>31</td>
<td>GS1 Finland - Synkka</td>
</tr>
<tr>
<td>32</td>
<td>GS1 Hong Kong (GS1CN)</td>
</tr>
<tr>
<td>33</td>
<td>GS1 Iceland - Gagnalaug</td>
</tr>
<tr>
<td>34</td>
<td>GS1 Italy datapool</td>
</tr>
<tr>
<td>35</td>
<td>GS1 Mexico - Syncfonia</td>
</tr>
<tr>
<td>36</td>
<td>GS1 Portugal</td>
</tr>
<tr>
<td>37</td>
<td>GS1 Sweden - Validoo</td>
</tr>
<tr>
<td>38</td>
<td>GS1 UK TrueSource</td>
</tr>
<tr>
<td>39</td>
<td>GS1HUB - GS1 Hungary</td>
</tr>
<tr>
<td>40</td>
<td>ITN_GDS - ItradeNetwork</td>
</tr>
<tr>
<td>41</td>
<td>Markant Industriewaren-und Vermittlungs AG</td>
</tr>
<tr>
<td>42</td>
<td>National Product Catalogue - GS1 Australia</td>
</tr>
<tr>
<td>43</td>
<td>NECS, Inc.</td>
</tr>
<tr>
<td>44</td>
<td>Riversand GDSN Data Pool</td>
</tr>
<tr>
<td>45</td>
<td>RIVIR</td>
</tr>
<tr>
<td>46</td>
<td>Salsify Data Pool v1.1.0</td>
</tr>
<tr>
<td>47</td>
<td>Systrion AG</td>
</tr>
<tr>
<td>48</td>
<td>TOBBsenkron - GS1 Turkey</td>
</tr>
<tr>
<td>49</td>
<td>Viagenie Global Data Gateway</td>
</tr>
</tbody>
</table>
Leveraging GS1 Standards to Enhance Product Master Data Management

Rachel Smith, Global Standards Technical Specialist

September 2021
What master data does GHSC-PSM collect?

- **General item information:** identifiers, brand name, product type
- **Product description**
- **Unit indicators:** base, consumer, ordering, dispatch unit indicators
- **Dimensions and weights**
- **Contact/role information:** brand owner, information provider, manufacturer
- **Pharmaceutical information:** dosage form, controlled substance, route of administration
- **Hierarchy:** parent/child items and quantities
- **Storage, handling, and shelf life**
- **Classifications:** GPC, INN, UNSPSC
- **Market authorization:** Permit numbers and dates
How GDSN Data is used by GHSC-PSM

GHSC-PSM has adopted and implemented the GDSN to receive item attribute information as the basis of the GHSC-PSM product catalog and seeks the benefits of synchronizing product data with trading partners for both new and existing items.

Using the GDSN process aims to improve supply chain data quality and management for you and all of our trading partners.

It will provide USAID-supported countries with the information they need to optimize decision making for GHSC-PSM order planning, procurement, shipping and receiving.
ARV GHSC-PSM Global Standards Requirement Compliance from October 2020 to September 2021
Key challenges in receiving complete and accurate product master data via GDSN from ARV suppliers

- Key difference between having all product items synchronized in the GDSN and having all required attribute data completed
- Continued education of supplier personnel caused by turnover
- Specific attribute challenges (e.g. UNSPSC, INN, Market Auth, Route of Admin)
- Coordination between synchronization entities
Multiple Educational Resources Available

Global Standards Website: https://www.ghsupplychain.org/index.php/globalstandards

- Data Synchronization Implementation Guide
  - Provides an overview of mandatory, required, and suggested data attributes, GDSN tags, definitions and guidance, and supporting code lists to support compliance with GHSC-PSM GDSN data exchange requirements for suppliers.

- GDSN Webinars
  - Currently there are 6 webinars available for GDSN education

- GDSN Attribute Guide
  - Includes examples for all attributes

- Learnbite tutorial videos
  - How to Interpret CIC Messages
  - How to address common attribute challenges
  - How IWorldSync can assist suppliers with syncing data with GHSC-PSM?
  - How to navigate IWorldSync’s GDSN portal

All of these resources can be found on our website!