Introduction

Using Decentralized Drug Distribution from Private Pharmacies, to reach HIV treatment goals in Mozambique

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Supporting registering the dispensed ARVs

Dakar, Senegal, November 30, 2022

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As treatment has made HIV a chronic, life-long disease, the demands on health systems and procurement and supply chain systems that provide antiretrovirals (ARVs) have become substantial, resulting in crowded health care facilities and other strains on the health care system. Numerous innovations have emerged to address the urgent need to provide millions of people with on-going access to ARVs, including multi-month dispensing (MMD) and decentralized distribution of ARVs through the private and public sectors.
In Mozambique, where approximately 13% of adults are HIV positive, clients typically receive their ARVs through hospital pharmacies and at other public health facilities, which are often overloaded and congested. Private pharmacies, on the other hand, exist in many communities and typically are open on weekends and in the evenings.
Methodology and work timeline

- **Collaboration:**
  - GHSC-PSM worked with EPIC, FGH and Implementing Partners (CCS, Ariel Glaser, Elizabeth Glaser, ECHO & ICAP)
  - Partnered with government through the Ministry of Health (MoH) and private sector

- **Timeline:**
  - 2019 - pilot in Maputo City at 4 semi-private pharmacies (FARMAC) and 6 health facilities (using manual system) by CCS
  - 2021 – expanded to a total of 74 private pharmacies (targeted 77) and patients from 39 health facilities
  - 2022 - Follow up to monitor implementation processes

- **Used web-based Information systems (e.g., tablets)**
  - Patient dispensing tracking system (iDART)
  - Stocks management – Visibility/accountability/security (SIGFAP)
Approach

- Created provincial technical working group led by pharmacists to support implementation of the strategy
- Provided technician on-job-training at HFs and PPs
- Reinforced the key message for patients
  - Consent to being involved in model
  - Being on ART in the first line with TDF/3TC/DTG
  - Have Viral Load < 1000 copies/or undetectable
- Demand creation activities
  - Differentiated Models of Services focused on DD
  - Addressing the advantages of picking up ARVs at the PP
  - Listening and discussing patients' fears and doubts
- Provided iDART mobile and SIGFAP training for PPs
- Identified, analyze and correct problems
- Follow up and stock reconciliation: developed a monthly report to support replenishing decision making to PP
Completeness of Referral: Ensure that all referred patients from HFs are on the iDART mobile at the PP (daily/weekly data triangulation)

Availability of equipment: scale, blood pressure device, table & chairs

Medicines availability and good storage conditions (ARVs)

On-the-job training/refresher:
1) ARVs dispensing service package
2) Use of electronic systems: iDART mobile and SIGFAP
Service package includes but is not limited to:

✓ Blood pressure screening
✓ Weight, height (body mass index)
✓ Questionnaire on adherence to ARVs, measured by medication count
✓ Pregnancy screening
✓ Adverse drug reactions monitoring
✓ TB screening questions
✓ General health status check before dispensing medicines
Patients picking up ARVs at private pharmacies

From pilot in 2019 to September 2022, a cumulative 19,035 patients enrolled in the Model*

- The latest data indicate that an average of 315 patients per month have been decentralized to the PPs during the past three months (3rd Qtr 2022)
- Trends in the past 2 quarters shows a reduction of enrolled patients.
- Many of the Health Facilities currently on the DDD PP pilot, started to implement the 6 months dispensing.
ARV pickup at private pharmacies

Weekend Pickup of ARVs in 2022 - for patient convenience

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Avg 2022</th>
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</thead>
<tbody>
<tr>
<td>Week Day</td>
<td>89.02%</td>
<td>87.63%</td>
<td>92.47%</td>
<td>91.75%</td>
<td>93.24%</td>
<td>93.77%</td>
<td>94.32%</td>
<td>97.16%</td>
<td>90.88%</td>
<td>93.85%</td>
<td>95.60%</td>
<td>92.8%</td>
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<tr>
<td>Week End</td>
<td>10.98%</td>
<td>12.37%</td>
<td>7.53%</td>
<td>8.25%</td>
<td>6.76%</td>
<td>6.23%</td>
<td>5.68%</td>
<td>2.84%</td>
<td>9.12%</td>
<td>6.15%</td>
<td>4.40%</td>
<td>7.2%</td>
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</tbody>
</table>

DDD at Private Pharmacies

- TLD90 consumption provided by SIGFAP - 4,311 packs dispensed during October 2022
- The dispensing represents over 13,293 patients picked up TLD90 at PPs in the last 3 months
Daily stock data monitoring

- ARVs from DPM (warehouse) to the Private Pharmacies –
- SIMAM => SIGFAP

SIGFAP – PP

SIMAM - DPM

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Daily stock data monitoring

<table>
<thead>
<tr>
<th>Provincia</th>
<th>Farmacia</th>
<th>Último stock Reportado</th>
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<tr>
<td>Select all</td>
<td>Select all</td>
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<tr>
<td>Maputo Cidade</td>
<td>Farmácia 766</td>
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<td>Farmácia Artur-3</td>
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<td>Provincia de Manica</td>
<td>Farmácia Aveiro</td>
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<td>Farmácia Chaham - 786</td>
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Graph showing stock levels from March 2021 to November 2022.

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Daily stock data monitoring

<table>
<thead>
<tr>
<th>Farmácia</th>
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<td>29-Nov-22</td>
</tr>
<tr>
<td>Farmácia Moquinino</td>
<td>39</td>
<td>29-Nov-22</td>
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<tr>
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<td>Farmácia Savane</td>
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<td>Farmácia TIC TAC</td>
<td>69</td>
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<tr>
<td>Farmácia QV</td>
<td>28</td>
<td>22-Nov-22</td>
</tr>
<tr>
<td>Farmácia 766</td>
<td>11</td>
<td>21-Nov-22</td>
</tr>
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### DDD challenges

- **Buy in from MoH**
  - Lengthy approval process
  - ARV management process and stocks transactions visibility
  - System costs - diverting investment from MoH

- **Demand creation at Health Facilities**

- **Private Pharmacies staff turn over**

- **Implementing teams being affected by COVID-19**

- **Sustainability beyond partner support**

- The new client identification and devolvement trends have continued to decrease over the recent months as attention has moved towards 6MMD rollout thus reducing demand creation.
DDD challenges continued

- Some patients not found on patient tracking system due to synchronization of the HF with the central server.
- Great mobility of technical staff in private pharmacies
- Private pharmacies closed due to business related reasons
- Location of some selected private pharmacies further away from the HF

- Patients ask for more Private Pharmacies available near their HF or in the neighborhoods of their homes
- Delays or missing the patient referral to private pharmacy in the electronic system, by the technicians at the HF, causing patients not to be found when need to pick up ARVs.
Conclusions / Recommendations

Critical success factors to consider when adopting, adapting or scaling up similar models or different settings

1. Government ownership and leadership
2. Multi-stakeholder engagement/ collaboration – need for strong partnerships
3. Stakeholder and resource mapping
4. Governance structure, information sharing and transparency (TWG)
5. Integrated electronic information systems for patients and medicines visibility
6. Ability to triangulate patient and stock transactions information
7. Continuous training, monitoring, learning and improvement
8. System scalability and sustainability.
Acronyms

1. **ANARME**: National Medicines Regulation Agency
2. **ARIEL**: Ariel Glaser Pediatric AIDS Foundation
3. **CCS**: Health Collaboration Center
4. **CMAM**: Center for Drugs and Medical Supplies
5. **DD**: Decentralized Distribution
6. **DDD PP**: Decentralized Drug Distribution through Private Pharmacies
7. **DPM**: Provincial Pharmaceutical Warehouse
8. **ECHO**: Efficiencies for Clinical HIV/AIDS Outcomes
9. **EGPAF**: Elizabeth Glaser Pediatric AIDS Foundation
10. **EPIC**: Meeting Targets and Mainstreaming Epidemic Control
11. **HF**: Health Facility
12. **FGH**: Friends for Global Health
13. **ICAP**: International Center for AIDS Care and Treatment Program, Columbia University
14. **iDART**: Intelligent Dispensing of Antiretroviral Treatment
15. **IP**: Implementation Partners
16. **MoH**: Ministry of Health
17. **PP**: Private Pharmacy
18. **SIGFAP**: Logistics Management System for Private Pharmacies
19. **SIMAM**: Information System for medicines and Medical Materials.

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Thank You

DDD PP TWG: USAID, CDC, EpiC, FGH, Ariel, GHSC-PSM and partners from MoH at provincial level, supporting PP in Maputo province, April 2022.

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