Introduction

Restoring health supply chain in conflict-affected health facilities through a holistic conventional and emergency supply chain intervention

Edmealem Ejigu, Deputy Country Director, GHSC-PSM Ethiopia
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The goal of **USAID Global Health Supply Chain Program- Procurement and Supply Management (GHSC-PSM)** in Ethiopia is to ensure uninterrupted supply of high-quality HIV, TB, malaria, FP/RH, and MCH commodities to prevent suffering, save lives, and create bright futures for families across the country.

**01** Improved availability of health commodities

**02** Strengthened in-country supply chain system

**03** Effective global and local collaboration to improve long-term availability of health commodities
In the past two years, Ethiopia has suffered from conflict that caused:
- massive internal displacement
- disruption of health service delivery
- loss of lives
Implementation Approach

GHSC-PSM worked with

- Afar and Amhara regional health bureaus (RHBs)
- Ethiopian Pharmaceutical Supply Service (EPSS) hubs

...to establish an emergency supply chain (ESC) system, and restore the conventional supply chain for 501 conflict-affected health facilities (HFs), including Dessie Hub, using the Ethiopian customized ESC Playbook

- Support Amhara and Afar RHBs to establish regional ESC response coordination platform with clear roles, responsibilities & action plan
- Provide support to Amhara and Afar RHBs to assess post-conflict situation
- Support regional and subnational coordination on supply chain emergency response
- Determine facility commodity needs for two-months of starter stock (Amhara and Afar) and monitor stock status in Tigray
- Restore Dessie warehousing and distribution activities
- Conduct site-level support to restore supply chain systems (IPLS, PMIS, APTS)
- Provide orientation on ESC response, IPLS, PMIS and APTS
Results (1)

- Established HSCM emergency response taskforce in Afar and Amhara RHBs and developed response plan
- Conducted orientation for 246 staff on emergency supply chain response
- Conducted supply chain post-conflict assessments in Afar & Amhara regions in 21 and 41 facilities, respectively, in Jan 2022 including Dessie hub
• Assessed post-conflict situation of EPSS Dessie hub and HFs in Amhara and Afar:
  – Forklift looted and damaged - 70% of the *storage space* became inaccessible
  – Records and data damaged - challenge to *forecast* demand for hub catchment and refill
  – Generator and cold room looted and damaged - unable to store and distribute *cold chain products*

• Dessie hub catchment-product need determined based on recent six-month historical consumption data

• Dessie hub catchment HFs re-mapped and linked to nearby EPSS hubs (Bahir Dar, Gondar and AA#2 hubs) as an interim gap-filling approach

• Starter stock for two month-consumption for all health program commodities delivered to all 461 accessible HFs
Post-conflict assessment findings @ HFs: Amhara (N=41) and Afar (N=21)

Functionality Status of the Logistics System Infrastructure and System, Amhara, January, 2021

Functionality Status of the Logistics System Infrastructure and System, Afar, January 2021
### Tracer drugs availability at 95 supervised health facilities in April 2022 in Afar and Amhara regions

#### % Availability

<table>
<thead>
<tr>
<th>Product Description</th>
<th>% Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB Patient Kit: Adult RHZE 150/75/400/275MG + RH 150/75MG Tablet</td>
<td>100%</td>
</tr>
<tr>
<td>Amoxicillin - 250MG or 125MG - Dispersable Tablet of 100</td>
<td>100%</td>
</tr>
<tr>
<td>Oxytocin - 10 INT. UNIT/ML in 1ML Ampoule Injection, 1 AMP</td>
<td>95%</td>
</tr>
<tr>
<td>Medroxy Progesterone Acetate - 150MG/ML in 1ML Vial - Injection (Depo Provera) with Syringe 21G...</td>
<td>95%</td>
</tr>
<tr>
<td>Etonogestrel - 68MG - Implant Capsule (Implanon) Set (Each)</td>
<td>100%</td>
</tr>
<tr>
<td>Rapid Diagnostic Test Kit of 25</td>
<td>75%</td>
</tr>
<tr>
<td>Artemether + Lumefantrine (20 + 120)MG 6x4 Tablet of 30</td>
<td>100%</td>
</tr>
<tr>
<td>HIV Rapid Test - First Test Kit, Stat-Pack of 20 Tests</td>
<td>90%</td>
</tr>
<tr>
<td>Tenofovir Disoproxil Fumarate - Lamivudine-Dolutegravir 300+300+50MG/Tablet (TLD) of 30 OR...</td>
<td>89%</td>
</tr>
<tr>
<td>Abacavir (AB) + Lamivudine (3TC) - (120MG + 60MG) - of 60 Tablet</td>
<td>67%</td>
</tr>
</tbody>
</table>
## Results (5)

<table>
<thead>
<tr>
<th>#</th>
<th>Performance Indicators</th>
<th>Key Achievement (January-April 2022)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FY22 Target</td>
<td>Results Apr 2022</td>
</tr>
<tr>
<td>1</td>
<td>Health facilities (HFs) supplied with starter stock</td>
<td>100%</td>
<td>91%</td>
</tr>
<tr>
<td>2</td>
<td>HFs that submit LMIS report to EPSS hubs</td>
<td>90%</td>
<td>84%</td>
</tr>
<tr>
<td>3</td>
<td>HFs that revitalized the PMIS</td>
<td>90%</td>
<td>64.6%</td>
</tr>
<tr>
<td>4</td>
<td>HFs in conflict affected areas that revitalized the APTS</td>
<td>90%</td>
<td>77%</td>
</tr>
<tr>
<td>5</td>
<td>HFs covered by supply chain restoration assessment</td>
<td>60</td>
<td>62</td>
</tr>
<tr>
<td>6</td>
<td>HFs that received Bin card, RRF and IFRR from GHSC-PSM supported HFs</td>
<td>461</td>
<td>100%</td>
</tr>
</tbody>
</table>


Challenges and Lessons

**Challenges**
- No budget for the procurement of essential medicines such as antibiotics, emergency kits, nutrition products in Amhara and Afar regions
- The damage to Dessie hub was substantial, needed huge amount of resources
- Coordination was difficult with large number of stakeholders involved and rampant duplication of efforts
- Technical assistance alone couldn’t fulfill expectation of the affected HFs: restoration of the infrastructure and systems needed major resources

**Lessons**
- Availability of legacy consumption data at upstream supply chain system enables staff to take immediate action for supplying the right product with best possible quantity estimation during such crisis
- Stakeholder coordination platforms from top, down to the community expedite resource leveraging and system revitalization
- More flexibility, priority and responsiveness to region-specific demands
- The crisis on the ground affected morale of the workforce and engagement in the restoration process improves their motivation to fully re-initiate services
Conclusions

• The ESC response enabled recovery of the routine supply chain at EPSS Dessie hub, restored the reporting and requisition system, access to health program commodities, and significantly improved availability of HIV, malaria, FP/RH, MNCH, and TB commodities in conflict affected HFs.

• Despite these, the health supply chain infrastructure and system have yet to be fully restored.

• There are still critical areas that require improvement such as restoration of
  • store and dispensary premises,
  • cold chain facilities,
  • equipping stores and dispensaries with standard shelves, counters and computers.
Recommendations

• Commodities consumption legacy data should be properly and securely stored at different levels of the supply chain echelon to use for any emergency response

• ESC-initiated activities should be maintained and institutionalized to continuously improve and sustain this work, increase flexibility and responsiveness of supply chain, and better prepare for future disasters:
  • formalize ESC policy for the health supply chain
  • strengthen functional coordination platforms with clear organizational structure
  • engage health workforce to fully re-initiate all services

• Increase efforts and resources to fully restore the health supply chain infrastructures and systems:
  • rehabilitate premises, procure medical equipment including cold chain facilities and essential medicines,
  • build staff capacity
  • ensure continuous access to logistics management tools
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