Logistics Management Information Systems – Pillar of Supply Chain Integration

The Ethiopia Experience

Supply Chain Timeline

- Integrated Supply Chain Agency - PFSA - created
- Health Commodity Management Information System (HCMIS): first automation of LMIS begins
- LMIS integration – HCMIS incorporates vaccines
- Mobile LMIS systems for district level EPI begins
- All PFSA hubs managing vaccines, delivering to woredas (districts)
- Direct delivery of vaccines to health facilities

Pre Integration LMIS - IPLS & EPI

- PFSA Center
- PFSA Hubs
- HCMIS
- FMOH
- RHB
- Zones
- Woreda
- Health Centers
- Health Posts

Current & End State EPI SC

- PFSA Center
- PFSA Hubs
- Health Centers
- Health Posts

EPI supply chain integration driven by need for increased efficiency, and sustainability including a reduction in supply chain levels and supply chain optimization

Pre Integration EPI LMIS

- Center: Automated
- Hubs: Automated
- Health Center: Paper/automation
- Health Post: Paper

Current EPI LMIS

- Center: Automated – Live Data Visibility
- Hubs: Automated – Live Data Visibility
- Woreda: c. 25% automated with live data visibility, target 100% by end of 2018
- Health Center: Paper
- Health Post: Paper

Ethiopia SC Integration By Component

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<thead>
<tr>
<th>Component</th>
<th>Legacy</th>
<th>Current</th>
<th>Goal</th>
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<tbody>
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<td>Quantification</td>
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<td>Procurement</td>
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While many components should and will remain vertical, LMIS has been the focus of integration

* Integrated at PFSA, but at health facilities mainly vertical

Benefits of Integrated LMIS

- Cost effective
- Increased data visibility & access (all data in one place without interfaces)
- Faster implementation
- Enhanced sustainability

Lessons Learned

- LMIS is an obvious area for integration, and LMIS integration can be done independently of other SC integration
- Mobile technology particularly suited for vertical SC components (e.g., ordering, receipt & issue) due to smaller number of items being managed
- Having all supply chain data in one dashboard increases data use

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HCMIS
- Warehouse Management
- Procurement
- Costing
- Interoperable with Financial Management
- Vaccine specific features (e.g., VRF)
- Deployed at PFSA Center & Hubs (regions)

mBrana
- Inventory management
- Requisition/Issuing
- Basic reports
- Vaccine specific features (e.g., VRF)
- Deployed at woredas (currently 150+ with plans to reach 600+ by 2018)

All software systems are open source, and developed in Ethiopia