Integrated and Responsive Vaccines Information Management System
The Case Of VIMS In Tanzania

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inSupply Consulting Services
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Who We Are

• A Bill & Melinda Gates Foundation funded project aimed at improving the efficiency and performance of health supply chains
• Transitioning towards a JSI-affiliated, East African regional supply chain consulting firm

Our Approach

• We develop bold, custom solutions tailored for our clients and the local context ranging from developing supply chain maturity strategies to designing and implementing data-driven, optimized supply chain systems

Our Partners
Lack of or Non-adherence to national eHealth strategies and uncoordinated efforts by development partners have often lead to innovative systems that operate in silos.

In Tanzania initiatives and technologies for managing routine immunization data, cold chain equipment, and stock management data are not integrated.
Logistics system structure

**ILS, ARV, LAB, and TB&L**

- Ministry/program
- MSD central
- MSD Zonal/Sales Point
- Regional
- District
- Lower level Health Facility

**VACCINES**

- Ministry/program
- MSD central
- MSD Zonal/Sales Point
- Regional
- DHIS2
- SMT
- CCEMT
- DVDMT
- Lower level Health Facility

**Order/Report flow**

**Commodity flow**
VACCINES INFORMATION MANAGEMENT SYSTEM

- Cold Chain Inventory Management
- Electronic Immunization Registry
- Vaccine Stock Management
- Routine Immunization Data
- Vaccine Arrival Registry (Barcoding)
VIMS developed based on user requirements and feedback from Pre-test regions
Comparison of Total Children vaccinated with BCG from Jan-March 2017

**Region** | **BCG Vaccinated (VIMS)** | **BCG Vaccinated (DVDMT)**
--- | --- | ---
Arusha | 22245 | 22598
Dar | 49305 | 48568
Lindi | 8598 | 8371
Mtwara | 14081 | 13823
Mwanza | 55320 | 56569
Njombe | 8663 | 8753
Tabora | 45528 | 43024
**Grand Total** | **203740** | **201706**

**Reporting**
- Jan-17: 99%
- Feb-17: 99%
- Mar-17: 98%

**Timeliness**
- Jan-17: 86%
- Feb-17: 90%
- Mar-17: 89%
COLD CHAIN EQUIPMENT FUNCTIONALITY AND REPAIR MANAGEMENT

- 2,228 Cold chain Equipment registered in VIMS
- With known status, location, type, energy source
- 71 Cold Chain Equipment with Non functional status due to various reasons
### INCREASED STOCK VISIBILITY:

<table>
<thead>
<tr>
<th>Store Name</th>
<th>Adequacy</th>
<th>SOH</th>
<th>MOS</th>
<th>Last Updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngorongoro DVS</td>
<td>43 %</td>
<td>5,960</td>
<td>2.95</td>
<td>24-05-2017</td>
</tr>
<tr>
<td>Arusha City DVS</td>
<td>57 %</td>
<td>1,780</td>
<td>0.37</td>
<td>04-06-2017</td>
</tr>
<tr>
<td>Arusha DC DVS</td>
<td>57 %</td>
<td>700</td>
<td>0.19</td>
<td>31-05-2017</td>
</tr>
<tr>
<td>Karatu DVS</td>
<td>43 %</td>
<td>4,780</td>
<td>2.37</td>
<td>04-04-2017</td>
</tr>
<tr>
<td>Longido DVS</td>
<td>71 %</td>
<td>200</td>
<td>0.14</td>
<td>21-05-2017</td>
</tr>
<tr>
<td>Meru DVS</td>
<td>100 %</td>
<td>4,340</td>
<td>1.39</td>
<td>01-06-2017</td>
</tr>
<tr>
<td>Monduli DVS</td>
<td>29 %</td>
<td>7,380</td>
<td>3.97</td>
<td>18-05-2017</td>
</tr>
</tbody>
</table>

#### List Of Batches Nearly To Expire

<table>
<thead>
<tr>
<th>Products</th>
<th>Batch</th>
<th>Stock on Hand</th>
<th>Expiry Date</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP-HepB-Hib</td>
<td>124P5044</td>
<td>128,900</td>
<td>31-Jul-2017</td>
<td>Serum institution of India</td>
</tr>
<tr>
<td>bOPV</td>
<td>M54041V</td>
<td>2,500,000</td>
<td>31-Jul-2017</td>
<td>Serum institution of India</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Store Name</th>
<th>Date</th>
<th>Date</th>
<th>Quantity</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mtwara</td>
<td>Tandahimba DVS</td>
<td>28-02-2017</td>
<td>02-03-2017</td>
<td>184,740</td>
<td>4,000</td>
</tr>
<tr>
<td>Arusha</td>
<td>Meru DVS</td>
<td>05-11-2016</td>
<td>29-03-2017</td>
<td>8,960</td>
<td>3,000</td>
</tr>
</tbody>
</table>
NEXT STEPS

**SCALE**

1. **2016 Q2**
   - VIMS Pretested in 7 Regions
   - 1 Region Testing Immunization Registry Functionality

2. **2017 Q1**
   - VIMS in 8 Additional Regions
   - 1 Additional Regions implementing Immunization registry

3. **2017 Q2**
   - VIMS Scaled to 100%
   - 1 Additional Regions implementing

**INDICATORS**

1. **Reporting**
   - 2016 Q2: 57%
   - 2017 Q1: 98%
   - 2017 Q2: Targeting 100% Reporting

2. **Timeliness**
   - 2016 Q2: 70%
   - 2017 Q1: 90%
   - 2017 Q2: 95% Timeliness

3. **DQA**
   - Less than 5% Difference
inSupply Consulting Services.
Innovations for Public Health Supply Chains

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