Nigeria NTP

Presents

‘Early Warning Indicator Features’

of the PICKnPACK tool

Presentation by Nigeria Team
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Pharm Maria Ochigbo

At the
PSM FLOW CHART

PARTNERS
DONORS
GDF/GLC

FCMS

CARRIER

ZONAL STORES

STATE MEDICAL STORES

Service Delivery Points

FMOH
COORDINATING
BODIES
• Principal Recipients
• CCM
• PSM TWG

NTP
PSM

COORDINATING
BODIES

• Principal Recipients
• CCM
• PSM TWG

GDF/GLC

PARTNERS
DONORS

PSM FLOW CHART
<table>
<thead>
<tr>
<th>Level</th>
<th>NTP Establishment</th>
<th>AUTHORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>National coordinator</td>
<td>Federal Ministry of Health</td>
</tr>
<tr>
<td>Zone (Region)</td>
<td>Zonal Pharmacist</td>
<td>State Ministry of Health</td>
</tr>
<tr>
<td></td>
<td>WHO professional officer</td>
<td>WHO</td>
</tr>
<tr>
<td></td>
<td>Logistics Assistant</td>
<td>ARFH – PR</td>
</tr>
<tr>
<td>State</td>
<td>State TBL Control officer</td>
<td>State Ministry of Health</td>
</tr>
<tr>
<td>Local Government Area (LGA)</td>
<td>LGA Supervisor</td>
<td>LGA Commission</td>
</tr>
<tr>
<td>SDP</td>
<td>DOTS Provider / microscopist</td>
<td>LGA Commission</td>
</tr>
</tbody>
</table>
OBJECTIVE

To describe how the NTP Nigeria has successfully developed & implemented early warning indicator systems to prevent stock outs & minimize wastages.
- Stock out rate of about 45-45% for main anti-TB drugs
- Expiration of products
- Distribution imbalances
- Pipeline leakages

Main causes

- Low capacity for LMIS at all levels
- Conflicts in design of procurement vs. distribution systems
- Poor procurement and shipment practices: over-fragmentation of shipments
- Poor data quality
- Sub-optimal accountability & transparency
- Poor PSM data visibility
- Use of loose drugs hampering accountability
Main strategies employed in EWS design

I. Monitoring stock levels and shelf lives at all depot levels (Central, zone & state stores)

II. Monitoring stock levels and accounting for usage at service delivery points (SDP)

III. Close-matching programme targets versus actual uptake (consumption) of drugs

IV. Segregation of data in reporting losses and wastages

V. Redesign LMIS to accommodate strong elements of PIPELINE VISIBILITY, ACCOUNTABILITY, TRANSPARENCY, M&E, PERFORMANCE APPRAISAL & FEEDBACK MECHANISM
Quarterly Review meetings help ensure that more than 95% of facilities send in their quarterly report – QRRIF

1. **SDPs** report to state team through LGA with QRRIF in hard copy:
   - [Beginning Balance], [Qty Received], [Qty Issued], [Losses/Adj], [Stock On Hand], [Cases registered]
   - LGA supervisor verifies QRRIF, gives feedback

2. **Stores** report with e-QRRIF:
   - [Beginning Balance], [Qty Received], [Qty Issued], [Losses/Adj], [Stock On Hand], [Expiry Dates]

3. **State PSM team** transfers QRRIF & e-QRRIP to PICKnPACK:
   - PICKnPACK generates comprehensive analyses
   - State team gives feedback to LGA supervisor
   - State team uses analyses to develop supervision and mentoring plan
   - State team shares with other levels/stakeholders
1. **Months of Stock-Cover**: Lets you know the actual stock coverage considering product shelf life and any risks of losses.

**Definition**: The no of months available stock will last (MOS) or be used before expiry (RSL), whichever comes first ...(PICKnPACK).

Eg (MOS = 14.5; RSL = 9MONTHS) therefore MOS Cover = 9

2. **Potential Write-Off (PWO)**: Lets you decide the portion of stock to return or transfer in time to be useful; also guides shipment planning.

**Definition**: The portion of a stock likely to expire unused, at current rate of use. (PICKnPACK).

- Occurs whenever MOS > Remaining Shelf Life (RSL)
- Eg MOS (14.5 Months) Minus RSL (9 Months) = PWO 5.5MOS
3. **Stock level milestones:** - Makes it easier to foresee the possible occurrence of stock-outs and wastages and in enough time for action to be taken to forestall such occurrences

**Definition:** Cascaded and descriptive MOS or MOS-Cover … (PICKnPACK).

i. Stock-out
   - **Decision:** Abomination!!! – Don’t allow to get there

ii. Emergency (0-1MOS),
   - **Decision:** Place emergency order

iii. Below Min (1-2),
   - **Decision:** Count stock more frequently or each time product is issued

IV. Ok (2-5MOS),
   - **Decision:** Keep in view

V. Overstock (More than 5MOS)
   - **Decision 1:** Check storage space / conditions
   - **Decision 2:** Check Potential Write-Offs, and if need be, make flexible plans to save
1. Widespread stock-outs ceased for main anti-TB drugs (from Jan 2011)
2. Reported pipeline leakages ceased
   - Increased accountability & transparency
   - Decreased demand
3. Supply system stabilized for vital anti-TB drugs:
   - Forecasts matching consumption closely and consistently
4. Of $7M returned to GF in 2012, $3M was attributed to savings from wastages; $1.5M to switch to 6 months regimen, etc.
5. Improved drug utilization profile
   - i.e. the average number of patient kits used to treat every 10 patients (10-PATIENTS INDEX:) improved from 18.1 in June 2010 to 12.2 at end of March 2011
   - NTP working with the range = 9-11
WEAKNESSES & WAY FORWARD

1. Low capacity at state level to use strategic information to resolve PSM issues
   - WAY FORWARD 1: Strengthen capacity for LMIS at state level
   - WAY FORWARD 2: Integrate and manage supply chains under state ministry

2. The Tool (PICKnPACK) in excel format; unable to accommodate large data volumes to cover all products
   - WAY FORWARD: Translate to convenient software

3. Multiple challenges of using electronic tools at the peripheral (DOTS) level
   - WAY FORWARD: (1) above

4. Low capacity of the DOTS level to complete own logistics reports; the LGA supervisors do most on their behalf
   - WAY FORWARD 1: LMIS training (ongoing)
   - WAY FORWARD 2: Hold review meetings at least 2 times a year
1. HR remains a key issue in PSM service delivery –

Quote:

The **will** to implement the PSM system for desired impact - makes the difference between achieving **so much** with **very little** and achieving **very little** with **so much**.

- In general, **peer review** helps to influence behavior change where poor remuneration & challenging work climate tend to dampen morale
- At state level in Nigeria, the supply system is as strong as the quality of the state logistics officer
  - Requires passion-driven & computer literate focal officer
- At the central level, capacity of the team to adapt PSM system to the special needs of environment is critical
- Use of kits (factory or bundled) makes drug management much easier
## Descriptive MOS at Facility Level-1

<table>
<thead>
<tr>
<th>NAME OF HEALTH FACILITY</th>
<th>PATIENT KIT CATEGORY ONE</th>
<th>10-PATIENT INDEX</th>
<th>MOS</th>
<th>STATUS DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molete PHC</td>
<td>23 36 60 1 -1 0</td>
<td>9.7 0.0</td>
<td></td>
<td>Stock out</td>
</tr>
<tr>
<td>Adifase PHC</td>
<td>44 28 24 48 48</td>
<td>12.6 7.6</td>
<td></td>
<td>Over-Stock</td>
</tr>
<tr>
<td>Ring-Road Hospital</td>
<td>1 35 17 19 19</td>
<td>9.4 3.2</td>
<td></td>
<td>OK</td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>5 5 8 2 2</td>
<td>20.0 1.5</td>
<td></td>
<td>Below Min</td>
</tr>
<tr>
<td>Govt Chest Hospital</td>
<td>3 134 110 27 27</td>
<td>11.3 0.8</td>
<td></td>
<td>Emergency</td>
</tr>
<tr>
<td>Search Laboratory</td>
<td>0 0 0 0 0</td>
<td>0.0 0.0</td>
<td>00-Jan-00</td>
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</tr>
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</table>
## Descriptive MOS at State Level

<table>
<thead>
<tr>
<th>Opening Balance</th>
<th>Quantity Received</th>
<th>Quantity Issued</th>
<th>Losses/Adjustment</th>
<th>Closing Stock (A+B)-C</th>
<th>Physical inventory</th>
<th>Nearest Exp Date</th>
<th>Months Of Stock COVER</th>
<th>Potential Write-Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>17,481,974</td>
<td>12,459,079</td>
<td>12,661,822</td>
<td>335</td>
<td>17,279,230</td>
<td>17,279,566</td>
<td>(dd-mm-yr)</td>
<td>Caseload</td>
<td>2,626,837</td>
</tr>
<tr>
<td>4,155</td>
<td>2,000</td>
<td>2,055</td>
<td></td>
<td>4,100</td>
<td>4,100</td>
<td>31-Oct-14</td>
<td>7.0</td>
<td>643</td>
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<tr>
<td>11</td>
<td>150</td>
<td>141</td>
<td></td>
<td>20</td>
<td>20</td>
<td>31-Jan-15</td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

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<td>20</td>
<td>20</td>
<td>31-Jan-15</td>
<td>0.3</td>
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<tr>
<td>Quarter-end stock status</td>
<td></td>
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</tr>
<tr>
<td>Sites Stocked out</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>At Emergency level</td>
<td>23%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Min level</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ok</td>
<td>40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over stocked</td>
<td>18%</td>
<td></td>
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<td></td>
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</tbody>
</table>

SUMMARY STOCK STATUS REPORT AT STATE LEVEL

![Bar chart showing stock status percentages]
## Childhood TB Coverage

### CHILDHOOD TB COVERAGE
(In Comparism with adult TB cases notified)

One Childhood case to 10 adult TB cases

<table>
<thead>
<tr>
<th>ADULT TB PATIENTS</th>
<th>Target Child.</th>
<th>Total Child Notified</th>
<th>% ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>424</td>
<td>34</td>
<td>23</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1</td>
<td>10</td>
</tr>
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</table>
7. Segregating losses

- Reveals sources and proportion of losses

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery to State store</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>State store inventory losses</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Delivery to DOTS sites</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Usage beyond 11 kits per 10 patient</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>Inventory losses at DOTS sites</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
<td><strong>1%</strong></td>
</tr>
</tbody>
</table>
THANK YOU