Mobile Contraceptive Supply Chain Improves Availability at Lower Cost

A costing analysis of two supply chains in Zimbabwe
Context

- Zimbabwe faced major supply challenges
  - Frequent stock outs
  - Economic crash

- New distribution model: Deliver Team Topping Up (DTTU)
  - Adapted from commercial sector
  - Puts burden of stocktaking on delivery team rather than those at SDP

- Promising practice:
  - Product availability at 95%, deliveries 98%
  - Contributed to improved indicators (CPR = 60%)
  - But assumed that DTTU is a high cost distribution model
The DTTU

Storage

DTTU team calculate Consumption, stock levels And top up to max level

Distribution

Truck drives with stock to facility

Management at the facility

Truck loaded based on last quarter consumption data
Costing the distribution systems in Zimbabwe
Supply chain costing tool (SCCT)

• What does the DTTU cost?

• Could the system be replicated?

• How would costs change if other products were added to the system?

• How do the costs compare to other more traditional distribution systems?
Why cost the supply chain?

Efficient and effective supply chains that support broader health service delivery policies to improve product availability

Supports Advocacy for Funding Logistics
Supports Planning and Management
Supports Policy Design
Supports the comparison and understanding of cost drivers

Supply Chain Costing Analysis with the USAID | Deliver Project’s SCCT
Supply Chain Costing Tool Framework

Supply Chain Tiers

- Tier 1: e.g. procurement costs of the ministry of health
- Tier 2: e.g. storage costs at a rural hospital
- Tier 3: e.g. driver per diems paid by a ministry of health
- Tier 4: e.g. operating costs of facility

Supply Chain Functions

- Procurement
- Storage
- Transportation
- Management

Supply Chain Cost by Tier

Total Supply Chain Costs

Supply Chain Costs by Function & Total Delivered Cost
Understanding cost drivers in Zimbabwe

DTTU – informed push
- Fleet management cost
- Truck capacity – size of the trucks being used
- Driver per diems
- # of staff in the truck
- Time taken to count and pick products at the facility

Traditional Pull System
- Number of staff to be trained system wide
- Staff turnover
- Supervision costs
- Ensuring orders are placed
- Time spent managing own stock
Comparison of component costs and by partner for DTTU and Traditional System

- **DTTU MOH NatPharm MOH**

  - Management
  - Transport
  - Storage

Traditional System

- **$0.20**
- **$0.18**
- **$0.16**
- **$0.14**
- **$0.12**
- **$0.10**
- **$0.08**
- **$0.06**
- **$0.04**
- **$0.02**

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- **DTTU**
- **MOH**
- **NatPharm Central Store**
- **MOH**
Of course costs may be higher than estimated!
Key Findings

• An integrated DTTU
  - Key cost drivers; LOE for delivery teams
  - Lower cost option for supplying primary care facilities/commodities and a smaller number of commodities

• Traditional system
  - Major cost drivers: facility staff, training and supervision - these are often unfunded and ignored
  - Less costly/more appropriate for larger numbers of commodities, hospitals