IMPROVING COMMODITIES AND DATA AVAILABILITY THROUGH DDIC IN NIGERIA

Miranda Gyang
Piloting a VMI model in Nigeria: the Direct Delivery and Information Capture (DDIC) System

Scope of pilot

USAID | DELIVER PROJECT received core funding to pilot model in 2012

Cost evaluation pilot and a test of feasibility in Nigeria

Bauchi state: 165 SDPs

Ebonyi state: 213 SDPs

Included commodities

- Reproductive health commodities
- Maternal, child and neonatal health commodities
- Malaria commodities
System Design

- Commodities delivered directly from CMS to SDPs
- Trucks act as rolling warehouses
- Bi-monthly delivery runs to select SDPs
- Replenishment to four MOS is linked to an automated process
- Data generated at health facilities synched with Top Up software to generate reports
Requirements for Sustained Commodity Availability

- Full supply of commodities at central level
- Specialized, automated inventory management database
- Trained and competent personnel to manage the automated inventory management database
- Coordinated, efficient transportation mechanism
Achievements: Significant Reduction in Stockout Rates

**Ebonyi stockout rates for family planning commodities at SDP level**

- Depo Provera: 55.74%, 6.56%, 3.74%, 2.53%, 3.45%, 2.94%, 2.45%, 0.95%
- Microlut: 72.13%, 4.92%, 4.67%, 3.03%, 5.42%, 4.41%, 3.43%, 0.95%
- Female Condoms: 25%, 18%, 9%, 7%, 4%
- Implanon: 10%, 5%, 12%, 7%, 2%
- IUCD: 19%, 5%, 8%, 5%, 1%
- Jadelle: 12%, 8%, 6%, 6%, 1%
- Male Condoms: 18%, 25%, 11%, 9%, 1%
- Microgynon: 68.85%, 3.28%, 3.74%, 2.02%, 1.48%, 1.96%, 2.45%, 0.95%
- Noristerat: 70.49%, 4.92%, 2.80%, 3.03%, 0.45%, 2.45%, 1.47%, 0.47%

**Bauchi stockout rates for family planning commodities at SDP level**

- Depo Provera: 6%, 6%, 6%, 7%, 0%
- Microlut: 10%, 9%, 6%, 4%, 1%
- Female Condoms: 25%, 18%, 9%, 7%, 4%
- Implanon: 10%, 5%, 12%, 7%, 2%
- IUCD: 19%, 5%, 8%, 5%, 1%
- Jadelle: 12%, 8%, 6%, 6%, 1%
- Male Condoms: 18%, 25%, 11%, 9%, 1%
- Microgynon: 16%, 6%, 10%, 7%, 1%
- Noristerat: 8%, 1%, 4%, 2%, 1%
Pilot DDIC Cost Evaluation

Study conducted in 5 States in Nigeria
- Bauchi
- Benue
- Ebonyi
- Cross River
- Sokoto

Four Last Mile Delivery (LMD) systems compared
- Review and Re-supply (R&R)
- Review and Direct Delivery (R&DD)
- Information Capture and Direct Delivery (IC&DD)
- Direct Delivery and Information Capture (DDIC)

Objectives of Study
- Cost each last mile distribution system instance
- Determine Stock out and inventory levels
- Determine Data Quality
- Consider Scalability
DDIC Pilot Evaluation Findings:

- **Data Quality**
  - DDIC and R&R: accuracy above 60%
  - IC&DD and R&DD: accuracy below 40%

- **Inventory Management**
  - All systems similarly functional
  - Single digit stock out rates
  - Good inventory availability given supply

- **Cost**
  - Normalizing costs by assuming a common scale (number of facilities and volume distributed) for all systems showed the DDIC and IC&DD with the lowest costs, followed by the R&DD and the R&R.

- **Scalability**
  - DDIC and IC&DD have lowest costs as Commodities increase
Next Steps:

Pilot Phase
- **378** SDPs across two states

Roll out to two more states
- Zamfara and Sokoto states using DDIC system since January 2014

Scale up number of supported sites
- **988** SDPs across four states