Dashboard Module Reduces Contraceptive Stock-Outs at SDPs in Bangladesh

Introduction

More than 29,000 service delivery points (SDPs), including family welfare assistants, family welfare visitors, health and family welfare centers, NGO clinics, and maternal and child welfare centers, work under the Directorate General of Family Planning (DGFP) of Bangladesh and distribute contraceptives in the community. However, before 2011, sporadic stock-outs of contraceptives at the SDP level often occurred due to lack of accurate and real-time logistics data, limited access to data, and poor feedback mechanisms, thereby increasing the risk of unwanted pregnancies and endangering women’s and children’s lives.

INTERVENTION METHODS

The USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, implemented by Management Sciences for Health, developed and incorporated a web-based SDP dashboard module into the Ministry of Health and Family Welfare’s (MOHFW) Supply Chain Management Portal (www.scmpbd.org), which addresses system challenges and:

- Provides SDP stock status information through the Upazila Inventory Management System (running in 488 sub-districts)
- Has a Short Messaging Service alert system for action reminders, tracking report submissions against timelines, and alerting to potential stock imbalance/stock-out of contraceptives
- Has an interactive dashboard presenting easy-to-understand charts, GIS maps, and tables on stock levels of individual SDPs

Figure 1: SDP Month of Stock Calendar View

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<th>Name and Address of SDP</th>
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- **Zero balance/stock-out**
- **0.1 months stock on hand**
- **0.7 months stock on hand**
- **1.7 months stock on hand**
- **3 months stock on hand**

This SDP faced frequent stock-outs of injectables for the period July 2015-May 2016, implying some monitoring gaps. Using this dashboard, the supervisor can easily track performance and take corrective actions both to prevent stock-outs and...
To assess the functionality, features, and benefits, SIAPS piloted the SDP dashboard module from March to September 2014 in 20 upazilas (sub-districts) in 4 districts of Bangladesh. The piloting result showed that use of the SDP dashboard module improved reporting time and quality and reduced the stock-out rate for contraceptives at the pilot SDPs from 1.63% in February 2014 to 0.96% in August 2014, a decrease of 0.67 percentage points. Appreciating the module’s effectiveness, officials of the DGFP and USAID decided to go for countrywide roll-out of the SDP dashboard module, with technical support from SIAPS. Accordingly, SIAPS worked with DGFP to roll out this module in all sub-districts of Bangladesh (n = 488) in 2015.

This tool allows local-level managers to transition from being “data providers” to “data users” and supports decentralized decision making. SIAPS developed 20 master trainers and 62 troubleshooters to ensure smooth functionality of the software and worked with DGFP to complete the massive task of training 971 (male 793, female 178) sub-district-level DGFP staff by June 2015.

**IMPLEMENTATION RESULTS FOR SDP DASHBOARD MODULE**

- <2% stock-outs of contraceptives at SDP level since countrywide roll-out in June 2015 (Figure 2)
- 97% of sub-districts reported on time
- Users need 66% less time to report
- Reporting rate increased to 100% and data quality improved
- Increased information exchange across different levels of users
- Enhanced feedback mechanism and problem solving
- Saved USD 5.48 million by avoiding unwanted procurement of implants

**SUCCESS FACTORS**

- Active involvement of DGFP in design and implementation phase
- User-friendly interface and robust inventory management tools developed by in-country software company
- Creation of a pool of master trainers and troubleshooters within DGFP
- Transitioning from mammoth paper-based tasks to automation
- Performance of SDPs and their managers is visible
- Government and donors’ commitments
- Strong partnership among stakeholders

**CHALLENGES**

- Delay in taking actions based on information
- Turnover of trained staff
- Insufficient ICT infrastructure (IT equipment replacement) and budgeting for maintenance
- Weak feedback mechanism from upper-level management/supportive supervision visits
- Limited authority for local-level managers in decision making process limits use of the dashboard
- The culture of using web technology during the decision making process has not grown yet

**Figure 2: % of SDPs experiencing stock-out of contraceptives**

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Ultimately, saving lives of women and children (drop in the fertility rate reduced maternal mortality rate).
LOOKING AHEAD…

SIAPS developed an advocacy and policy plan to ensure sustainability of SIAPS-supported tools, including the SDP dashboard module, which was endorsed by MOHFW. For smooth handover of the operation, maintenance, and oversight of the module, SIAPS started working with the MoHFW to develop a transition plan in 2014. In this connection, a “tools management committee” within DGFP has been formed and is functional to oversee the transition. DGFP also included the module’s management and maintenance cost in its Costed Implementation Plan (2015-20). However, MoHFW’s continuous involvement and ownership is highly imperative to ensure the use of this tool.

References

i Countdown to 2015
ii NIPORT, MEASURE Evaluation, and icddr,b
iii Bangladesh Maternal Mortality Survey, 2011