

## Commentary Article

# Ensuring Contraceptive Security Using Online LMIS in Family Planning (FPLMIS) Program in India: Challenges and Opportunities

Himadri Pathak\*

Jhpiego India Country Office, New Delhi, India

### ABSTRACT

The need for family planning commodities is increasing globally, however many developing countries are yet to meet the supply against demand which has scaled up the unmet need and unplanned pregnancies. Several countries have tried to stream line contraceptives supplied using various modalities with varying degree of success. India launches online logistic

management system for family planning commodities to secure contraceptive availability at health facility level. Online FPLMIS is a significant step of Government of India for ensuring reproductive rights of the Indian women.

**Keywords:** Commodity; Store; Facility; Service delivery point

### Introduction

According to National Family Health Survey-4 (NFHS-4) [1], the modern contraceptive prevalence rate (mCPR) among currently married women of reproductive age is 48% and 13% of currently married women have an unmet need for family planning in India. In India, there is a critical gap in the supply chain in contraceptive resulting in unavailability of contraceptive for continued use by eligible clients [2]. There is no data on contraceptive stock out at the country or service delivery point in India. USAIDS [3], reported that 11 out of total 33 countries surveyed reported zero stock out at central level. Out of 8 countries reported stock out of combined oral contraceptives in the range of 8-42% and highest stock out reported in Kenya. 11 countries had stock out of Injectable contraceptive in the range of 11-100%. Only 8 out of 33 countries had stock out of IUCDs in the range of 1% in Bangladesh and 83% Kenya. There was significant stock out of male condom in 25% of countries. One of the reasons of stock was error in forecasting of each commodities in some countries. However, report does not speak about anything specific to India. So, a strong and reliable supply chain management key to contraceptive security of each country. Only a contraceptive security can address the countries huge demand for family planning and there by improving total fertility rate and other health indicators of the country.

#### What is FPLMIS?

FP-LMIS is a web-based and SMS based application that enables a user for instant access to the contraceptive stock information up to the Accredited Social Health Activist (ASHA) level. It can be downloaded from the google play store in Android-based SMART mobile. A store manager/health worker can access this application using a secured login provided by ministry of health and family welfare. The application would be used to display, aggregate, analyze, and validate data from all levels of the logistics system of FP commodities thereby enabling strategic

logistics decision making. This application calculates annual demand and usage for online indenting, distribution, and stock management and also provides critical information on stock-outs, overstock, expired and damaged stock in the form of reports and graphs to decision-makers to assist them in the planning of procurement of commodities under National Family Planning Program [4]. Ali [5], recommended the use of the use of mobile technology for family planning logistics management to overcome challenges of contraceptive security.

#### What are family planning commodities in India?

Under the national family planning program, several contraceptives are supplied to eligible clients for delaying and spacing births. Condom, Combined oral contraceptive pill (Mala N), Chhaya pills, Emergency contraceptive pills, MPA injectable contraceptives, intrauterine contraceptive device (IUCD375 and 380A), pregnancy test kit, and tubal rings. All the contraceptives are supplied free of cost from all the public health centers in the country and distributed through the network of ASHA up to the community level.

#### Experience in LMIS roll out in other countries

Various supply chain procedures have been evaluated in many low- and middle-income countries in an attempt to improve contraceptive security at health facility level, however there is no significant evidence to prove it.

Tariq, Shahzad, & Lama [6] Reported that low computer literacy among participants became a hindrance to the successful LMIS training and roll out of LMIS in Pakistan. Computer orientation and on the job training is a critical steps in sustaining LMIS usage in the health facility.

A non-randomised study conducted in Senegal to evaluate the effect of intervention on contraceptive stock availability in health facilities by Cavallaro et al. [7]. They stated that only LMIS cannot

increase the uptake of contraceptives unless other activities such as demand generation, involvement of community and outreach activities are planned concurrently. The author suggested a staggered approach of implementation of interventions for a measurable impact of supply chain impact on contraceptive usage.

An evaluation of online contraceptive logistic system (cLMIS) of Pakistan done by Shafique Ahmed Qureshi [8] found huge discrepancy in the availability of commodities. The entire department either had excess out of stock of contraceptive even if the system had an autogenerated demand estimation facilities in the LMIS. On evaluating the qualitative component found lack of training and refresher training, non-uniformity of data collection, poor internet connectivity at service delivery points (SDPs) that became the hindrance in effective functioning of the CLMIS.

### The rationale for LMIS in family planning program

In India, Family Planning commodities are centrally purchased and supplied to the states and union territories as their requirements. Keeping in view the enormity and size of contraceptive users which is increasing day by day, an efficient logistics management is a demand of the time. Unlike vaccines, knowing the stock of contraceptives instantly is very difficult as contraceptives are kept at various levels up to the ASHA. So artificial stock out is a frequent occurrence at block stores. The introduction of computerized FPLMIS will enable proper monitoring of stocks lying at any facilities of the country. The FPLMIS also abolishes the problem of poorly managed stores, weak supply chain, poor knowledge on-demand forecasting, inventory management and distribution, frequent stock-outs or overstocks, poor storing condition, delay in transportation of commodities, weak monitoring and supervision are some of the reasons for interrupting supply or non-availability of contraceptives at various levels of the health system. Therefore, there is a need for an effective and efficient logistic and supply-chain management system in India for the provision of quality family planning services.

### The proposed changes in FPLMIS in India

Until 2017, India was using a top-down push system for delivering contraceptives to the health facility level and indenting was pure paper-based. States forecast and calculate the annual demand of each contraceptive and submit the demand to the family planning division of the Government of India (GoI) and accordingly procurement takes place centrally and commodities were supplied from the central store to the state store to the district store. District store supplies commodities to the block stores, which further distributes commodities to sub-block level health facilities, health sub-centers, and finally to ASHA. However, in 2017, the Government of India planned a 360-degree shift of the existing push system to pull system in contraceptive delivery to health facilities. Present FPLMIS system has designed such that logistics indent should come from bottom to top that is from ASHA level to health sub-center level. Sub-health centers submit indents to block primary health center (BPHC) store and BPHC and other primary centers will submit indents to district store, and from district to state and state to national level. To ensure proper distribution and consumption of the commodities in the Family Planning program, the "Pull" approach should be adopted, so that the commodities move properly and one can ensure and track proper consumption up to the service delivery point [4].

**Benefits of FPLMIS:** Web-based FPLMIS is user friendly, dependable, and reliable IT tool that can be used by all cadres of health workers for indenting, issuing, and updating FP commodity stock.

Web / App-based indenting mechanism enabled staffs for better indenting and timely availability of FP commodities for uninterrupted service delivery. The system also gives early warning of near expiry stocks to the logistic manager so that wastage becomes less. The app is an efficient tool for real-time monitoring of stocks, frequency and timeliness of indenting from its efficient dashboard indicators

**Opportunities:** Since the introduction of National Health Mission in 2005, there has been significant improvement in the availability of IT infrastructures at the public health facility across the country along with Human resources for health management and service delivery. Internet connectivity with the 4G network is also available in all parts of the country. SMART android phone is owned by most of the health staffs posted at the primary health center level as well as sub-health center level. The mobile platform has been used by several countries for delivering health messages and counseling services in many countries.

**Challenges in rolling out FPLMIS up to grassroot level:** I anticipate some genuine concern like Low digital literacy among health workers and non-user friendliness of the mobile platform to be handled by health staff of rural health centres. Clarity and visibility of small font displayed in the mobile interface for entering data is a challenge for elderly health workers. The high workload of existing staffs may ignore this monthly activity. Since indenting is not a daily process, there is a tendency to forget all technical details of the application which poses a challenge for sustainability. Ability of ASHAs to successfully frame an indenting message in their basic phone is a challenge considering their basic education. Low motivation level among health staff for additional work is also a concern. Unlike vaccines, there is no dedicated vehicle available for contraceptive delivery to the block level and beyond which may be another challenge in timely delivery of the contraceptives.

### Recommendations

Looking at the IT literacy and vastness of human resources in the country, following few easily doable activities will definitely go a long way in sustainable roll out of the FPLMIS in the country.

1. All health facilities, sub-centers and ASHAs to be linked to their nearest store where from indented commodities can be collected without much travel.
2. Offline supply of contraceptives from higher store to lower one should be stopped with immediate effect and online indenting should be made compulsory for all.
3. A good quality training of involving specialised trainer using local vernacular is crucial where English or Hindi literacy is poor. Job aids in local language to be supplied to the FPLMIS users to rehearse what they have learned in the training.
4. Training of elderly staff should be in small batches, focusing more on practical application and in local

languages is essential for a clear understanding of the contents.

5. A route chart has to be prepared for the direct delivery of commodities to the indenting facilities from the district store or block level store.
6. Dedicated budget for FP commodity supply will ensure independence for the supplying commodity as per convenient.
7. Creating a monthly feedback mechanism at the district and block level Chaired by a family planning nodal officer will bring accountability and sustainability to FPLMIS.

## Conclusion

Online FPLMIS, development of by Govt of India is a significant tool for ensuring commodity security at the health facility level. It is the only one part of the entire supply chain system. Creating a strong accountability framework and strong performance review mechanism will take a long way in achieving contraceptives security in all the health facilities. Provision for dedicated transportation will ensure timely delivery of contraceptives at all level in the country.

## References

1. National Family Health Survey-4 (NFHS-4) (2016) India Fact Sheet, National Family Health Survey. Mumbai: International Institute for population science, India.
2. Sudhir Maknikar (2020) India: Protecting reproductive choice through stronger supply chains. Path.
3. USAIDS (2018) USAID Global Health Supply Chain Program- Procurement and Supply Contraceptive Security Indicators Report. DC Chemonics International Inc., Washington,
4. <https://main.mohfw.gov.in/publications/annual-report-department-health-and-family-welfare-2017-18>
5. Ali M (2017) Ensuring contraceptive security through effective supply chains. World Health Organization, Geneva.
6. Muhammad Tariq, Khurram Shahzad, Shyam Lama (2014) Building workforce capacity to operate a web-based logistics management information system (LMIS) in Pakistan. J Pharm Policy Pract(Suppl 1): O19.
7. Francesca L Cavallaro, Diane Duclos, Rebecca F Baggaley, Loveday Penn-Kekana, Catherine Goodman, et al. (2016) Taking stock: protocol for evaluating a family planning supply chain intervention in Senegal. *Reprod Health*13:45.
8. Shafique Ahmed Qureshi, Saima Hamid, M Suleman Bajwa (2017) The Role of Contraceptive Logistics Management Information System in Provision of Family Planning Services in the province of Sindh, Pakistan. *Divers Equal Health Care* 14 (1): 34-39.

**Address of Correspondence:** Dr. Himadri Pathak, Jhpiego India Country Office, New Delhi, India, Tel:+7002063318; Email: drphimadri@yahoo.co.in

*Submitted: December 30, 2020; Accepted: January 20, 2021; Published: January 27, 2021*