



Availability of essential medicines  
in public health facilities awaiting  
improvements- urgent need to adopt  
Tamil Nadu based model fully



## Background

The need to ensure adequate and regular supply of essential medicines in public health facilities has been a significant concern in Maharashtra. This issue seems to be multifaceted, and is linked not only with budgetary allocation towards medicines, but is also significantly related to effectiveness of the medicine procurement and distribution system<sup>1</sup>. Since 2011, Maharashtra government has taken some steps such as e-tendering, e-aushadhi, formation of warehouses, quality assurance etc., with regard to medicine procurement and distribution (henceforth referred as P & D) system for improving availability of essential medicines in PHCs. However, recent surveys in the state indicate that even after a decade of launching the National Health Mission

(NHM), the government has failed to keep its promise of ensuring availability of essential medicines in the rural Primary Health Centers (PHCs)<sup>2</sup>. Data from Directorate of Health Services (DHS) shows that stock-out figures for all the PHCs across Maharashtra are also pegged at 60% (DHS, 2016)! Also the same data reveals that, only 40% of the medicines were supplied as against indented list (DHS, 2016)<sup>3</sup>. In August-2017 a survey conducted in a sample of 110 PHCs in Maharashtra showed that only in 36% of the PHCs, the supply-situation was satisfactory<sup>4</sup> (Box no. 1). This study reveals that despite some improvements in the medicine procurement and distribution system, regular availability of essential medicines in PHCs is still not at the level that is required.

### Box no. 1 - Key findings from SMS survey on availability of 20 Essential medicines in a sample of 110 PHCs in Maharashtra, conducted by SATHI in August 2017

- Overall in 51.4% of instances, there were unsatisfactory stocks of medicine in the sample-PHCs. In only 36% of the instances, was there sufficient as well as appropriate stock of medicine.
- Comparison between regions showed that North Maharashtra region has 19.6% instances of 'no stock', which is almost double that in Konkan region (10.3%). On the other hand, in case of excess availability of medicine stock, in Konkan region 17.9% of instances of excess medicine stock have been noted, which is around double compared to Marathwada region with 9.1% of excess instances.
- Medicine wise analysis showed that, out of 16 selected medicines only 4 medicines (i.e. only one fourth) were available at satisfactory level in more than 60% PHCs. 11 out of 16 medicines did not have sufficient stock in more than half (50%) of the PHCs.
- Regarding e-aushadhi, 48 percent pharmacists stated that they experienced difficulty while updating stock in e-Aushadhi software. Also, 44 out of 92 PHCs have various kinds of problems while dealing with e-Aushadhi software such as lack of internet facility, lack of internet coverage, irregular supply of electricity or generator facility in PHC.





Another study was conducted by SATHI<sup>5</sup> in 2016 on understanding how these policy level decisions in medicine procurement and distribution system are being implemented at various levels. This study reveals that there are significant shortfalls in the implementation of these policy level decisions.

It is quite evident from the available data and this study that the objective of supply of essential generic medicines free of charge to all patients attending Public Health Facilities in Maharashtra has not been achieved till today, though the reforms in this direction were initiated from 2012, though has been achieved in Kerala and Rajasthan due to appropriate

adoption of the Tamil Nadu Medical Service Corporation -TNMSC- model. TNMSC model has been appreciated and recommended by agencies such as the WHO, National Health Mission, Common Review Mission-2010, the Planning Commission - 11th and 12th FYP, High Level Expert Group for the 12th FYP, National Health System Resource Centre (NHSRC). There have been proposals by various civil society organizations, health activists and academicians, for implementation of a Tamil Nadu Medical Service Corporation (TNMSC) type model for medicine procurement and distribution in Maharashtra.

The welcome decision of establishing corporation for medicine procurement and distribution system in Maharashtra, still awaiting proper implementation

In this context, it is welcome that in July 2016, the Chief Minister of Maharashtra has taken along awaited decision of establishing an independent corporation for the procurement and distribution of medicines for the public health system in the state, which is a step forward. However, almost after a year, in July 2017, it was declared that, the Maharashtra government's plan for the formation of an independent state-run corporation for the purchase and distribution of medicines and drugs has been shelved. According to information, Chief Minister, who had last year announced plans for formation of the independent corporation, has instead approved a proposal to appoint the Centre-backed Haffkine Institute for the procurement of medicines, because senior bureaucrats opined that it would involve high



operational costs. "The government's previous experience with state-run corporations has not been very encouraging. Rather than appointing another one, it was felt that granting powers to the Haffkine Institute would save time and costs. They (the institute) have the relevant experience," said a senior government official<sup>6</sup>.



This is a story of a very busy and accessible PHC in Thane district, catering to a population of 38,000, with an OPD of 30 to 32 thousand and IPD of close to 2500 per year. In 2013-14, the PHC had spent 47% (Rs. 82,711/-) of its Rogi Kalyan Samiti (RKS) funds (Every PHC receives RKS funds worth Rs. 1, 75,000/- annually under NHM) on medicine purchase at local level. This is extra expense, apart from the regular medicine supply received by the PHC, the reason being that the PHC has a huge load of patients, but they do not get medicines as per their requirements. Essential injections (like Gentamycin, Dexamethasone, Dicyclomine Hydrochloride, Diclofenac Sodium and Ranitidine etc.) are not supplied as per indent, in a timely manner, and in sufficient quantities. Besides, with a high IPD rate, surgical materials (disposable needles, syringes, gloves, IV cannula sets) are required regularly, but they are not supplied in proportion with the demand. Hence the only option is to purchase the medicines and surgical materials locally. So regular is this trend, that the local medical supplier gives them the medicines on credit basis, he is paid after the RKS funds are received!

### Case Story 1

*47% of the RKS funds being utilized for routine medicine and materials purchase, due to short supply.*

The RKS funds are to be used for welfare of patients, and can be used for certain emergency medicine purchase. However, as the above list indicates, regularly required medicines which are part of the Essential Medicine List, are being purchased through these funds.

*Source- Cases documented during conduction of Participatory Audit and Planning Process in PHFs from Thane and Nandurbar dist, Maharashtra.*

### Five core components of TNMSC and its comparison with situation in Maharashtra

There are five essential features of the TNMSC model and if any one of these is absent or not appropriately adopted, the objective is not achieved. States like Odisha, Karnataka, Bihar, Haryana, and Maharashtra have failed because they have taken a piecemeal approach in adopting the TNMSC model and have left out one or two of the five core components of the TNMSC model whereas Kerala and Rajasthan have adopted all the five core components<sup>7</sup> appropriately. These experiences have been studied in detail. These five core components of TNMSC are compared with situation in Maharashtra; referring to findings from study conducted by SATHI (2015-16) are mentioned below-

#### 1) Fully autonomous and technically skilled empowered, dedicated state level body for procurement -

This is a critical and essential feature; once broad policy has been decided, no reference is made to the government; all routine decisions are taken by the corporation board. This prevents unnecessary political interference, reduces delays, and ensures that the technically competent and dedicated full time structure deals with procurement efficiently, transparently and in timely manner.

In Maharashtra, it is only in July 2016 that a decision was taken to form Independent Corporation





for drug procurement and distribution system. One year has passed and this decision is yet to be implemented. Maharashtra very much needs such an autonomous, competent specialized body.

## 2) E tendering directly from the manufacturers; Institutional Transparency -

Medicines are purchased through transparent e tendering directly from the manufacturers without any intermediate agents. Name of medicine, price of purchase, name of manufacturer and report of quality testing etc. are all posted on website to bring transparency in the system.

Maharashtra has adopted the e-tendering

system. But there is no transparency. Like in Tamil Nadu, if the information about which medicines have been bought from which company when and at what price is available on the official web-site any company can complain if it's bid has been unduly rejected or any public interest group can complain about any suspicious dealing.

## 3) Demand driven supply system -

This is an important and non-negotiable feature. Instead of conventional indenting, in TN and Kerala, PHCs choose which medicines and in what quantity they require, as per their need within the budget of Rs.1.2 lakh by using a 'passbook' system. Unnecessary medicines are neither asked for, nor

This case study is of a PHC in a remote tribal area in Nandurbar district, which is characterized by paradoxical situation of poor stock of essential medicines and large stock of expired medicines. There are multiple problems which plague this PHC and others like it, situated in remote tribal areas. The stock registers are not updated. There is a computerized stock keeping system, but being in a remote region, there is no internet connectivity. The registers need to be physically taken to the block level for updating through computerized system.

Every time replenishment of medicine stock is required, the PHC has to arrange for a vehicle to get the stock from the district. There is no guarantee of receiving the stock of medicines as per the indent. As a result they have a strange situation of poor stock of essential medicines which are actually required, along with excess stock of medicines, which are not required. The excess stock is due to 'dumping'. It has also been observed that stock of medicines nearing expiry is 'dumped' in the PHC. As a result medicine stocks beyond the expiry date were found in 4 PHCs, during physical verification of medicines in Feb-March 2016, under CBMP.

This case-study is a perfect example of poor management of medicine supply, and upon further investigation, it emerged that despite the computerized indent system, the trend of preparing the annual indent by increasing 10% stock in the last year's indent, continues.

Source- Cases documented during conduction of Participatory Audit and Planning Process in PHFs from Thane and Nandurbar dist, Maharashtra.



### Case Story 2

*PHC starved of essential medicines and flooded with rarely required ones.*



supplied. At the same time genuinely necessary medicines, even if required in higher quantity in some facilities, get supplied effectively and adequately so long as this demand is within the yearly budget of Rs. 1,2 lacs. Stock-outs and wastages, dumping are minimized.

Maharashtra has not adopted this passbook system. As a result, in many places medicines are supplied to PHCs just because they are available in the store, even though the particular PHC may not need it. This leads to a lot of wastage. (Just to give an example, typical information recently received through a letter (Annexure I) on 26th July 2017 from a Medical Officers in a PHC in Kolhapur district shows oversupply of medicines which are not needed and undersupply of some essential medicines.)

#### 4) Updated and focused list of essential medicines-

TNMSC procures medicines from a focused list of medicines (260 Essential Medicines and 200 other 'Specialty Medicine') while Kerala has a list of 588 essential medicines (compared to the huge list of 1800 medicines which Maharashtra had which included many redundant formulations).

Maharashtra only recently has its own State Essential Medicine List. I will have to be periodically

reviewed and updated.

#### 5) Quality Control-

Standard quality regional warehouses store medicines in good condition in orderly

fashion and samples from regional stores are tested in two

different empanelled laboratories confidentially.

The medicines are released from the regional warehouse only after the sample passes quality testing. If the samples fail the check, replacement of the entire batch is required.



In Maharashtra, eight regional warehouses were to be built but are not ready as yet. Samples from each batch are sent for quality testing to the empanelled lab. From the Central Store in Aurangabad. It is entered on e-aushadhi by DHS. After receiving positive report from lab, medicines are distributed to PHCs. However, unlike in TN, testing is done in one lab and not two.

## Key recommendations of the National Consultation on 'State medicine procurement and distribution systems

Given this overall background, it was felt relevant to organize a consultation for brainstorming on appropriate design of an autonomous Corporation for medicine procurement and distribution in Maharashtra. This consultation was jointly organized by SATHI, Pune and National Centre for Advocacy Studies (NCAS), Pune in collaboration with School of Health Systems Studies, TISS, Mumbai, on 18th March 2017. The consultation was attended by key

experts from states with well-functioning medicine procurement and distribution systems such as Rajasthan, and Kerala, officials from Procurement cell, Directorate of Health Services, and State NHM Maharashtra, civil society representatives from Maharashtra and public health experts from NHSRC, New Delhi, and School of Health Systems Studies, TISS, Mumbai. There were around 22 participants in the consultation.





Key recommendations for developing an appropriate medicine P&D system in Maharashtra,  
The following recommendations emerged from the consultation-

- ❑ In Maharashtra, empowered, independent, technically efficient body with dedicated, specialized team endowed with autonomy and transparency should be established for improving medicine procurement and distribution system.
- ❑ Since, state government has appointed Haffkine Institute for the procurement of medicines; this Institute needs to be vested with autonomy, budget, dedicated competent team and transparency as TNMSC.
- ❑ Some of the basic non-negotiable requirement for corporation are - sufficient accumulated technical expertise, empowered body, autonomy and mechanisms for ensuring accountability.
- ❑ One drug warehouse should be there in each district; however the number of warehouses should also be decided on the basis of population-density and disease profile in the area.
- ❑ Maharashtra State's Essential drug list should be reviewed periodically.
- ❑ Developing standard treatment guidelines (STG) should not be linked with the setting up of the Corporation. It should be independent exercise and should not be one time activity; its regular review needs to be done.
- ❑ NHM has declared 5% additional incentive in PIP if a proper system for medicine procurement is set up following TN model. It should be noted that, as per guidelines by NHSRC, they can give inputs in this regards and also ready to collaborate in setting a corporation.
- ❑ While establishing corporation, it can be started with a modest list of medicines and gradually it can be modified and number of medicines can be increased.
- ❑ In order to set up procurement system, Finance dept, General Administration dept. and secretary level officer should be involved.
- ❑ Supplementary human resource at various levels should be appointed to take care of additional informatics related tasks and their regular capacity building should be done.
- ❑ For monitoring, prescription audits should be conducted to understand about what doctors are prescribing and whether they are following EDL or not. To make it more acceptable, it can be termed as prescription reviews.
- ❑ Need to set up Grievance Redressal Cell and provision of carbonated paper for writing prescription.



Overall, it is recommended that, in order to adequately improve the medicine procurement and distribution system, to ensure adequate availability of all medicines in all PHCs in real terms, there is critical need for complete overhaul of the system. Haffkine Institute needs to be vested with autonomy, budget, dedicated competent team and transparency as TNMSC. The package of components such as a transparency, autonomy of the corporation, demand-driven supply based on passbook system, etc which has proved highly effective in TN, Kerala and Rajasthan needs to be implemented in

Maharashtra, while making relevant innovations and considering state specific conditions of the health system.



Establishment of Technology-Based Health Procurement and Supply Chain Management System, and Capacity Development

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