

Reports

Access to medicines in the Indian Public Health System – what works and what does not? A review of the National Health Mission Common Review Mission Reports (2007-2021)

Erin Hannah¹, Nisha Basheer¹, Neha Dumka¹, Atul Kotwal²

¹ Knowledge Management Division, National Health Systems Resource Centre, ² Executive Director, National Health Systems Resource Centre

Keywords: Access to medicines, Health Systems Strengthening, National Health Mission, India, LMIC

<https://doi.org/10.29392/001c.84486>

Journal of Global Health Reports

Vol. 7, 2023

Since the inception of India’s flagship “National Health Mission” (formerly known as the National Rural Health Mission), considerable efforts have been made to ensure access to quality and affordable healthcare, including medicines. Over time, there has been a differential, yet noticeable improvement in the availability and access to medicines across states. This underscores the need to review and analyse various state-specific practices in India supported or recommended by the NHM, to identify key enablers and barriers. Consequently, a review of NHM’s Common Review Mission (CRM) reports between 2007 and 2021 was undertaken. All findings relevant to medicines were identified, retrieved and analysed. Core themes pertaining to medicines included: mechanisms adopted by states for procurement and supply chain management, health system factors influencing the supply chain, the convergence of national health programs, the rollout of the Free Drugs Service Initiative and Comprehensive Primary Health Care, and awareness among the healthcare providers and community. The article further expounds on these themes in the Indian context, highlighting the determinants of access to medicines as well as their interlinkages. In conclusion, it underscores the need to strengthen the overall health system to accelerate universal access to free essential medicines at public health facilities.

India launched its flagship ‘National Health Mission’ (erstwhile National Rural Health Mission: NRHM) in 2005 for undertaking the architectural correction and strengthening of its public health system. Following its launch, there have been several national and state-specific initiatives to strengthen the public health system’s capacities and processes to deliver affordable and quality healthcare, including the provision of essential medicines, to the end-users. The improvement in the availability and access to medicines across the states has been appreciable, though its progress has been differential. This underscores the need to review and analyse various state-specific practices in India supported or recommended by the NHM, to identify key enablers and barriers.

Several mechanisms have been instituted for monitoring the states’ progress under the NHM. One of them is the Common Review Mission (CRM) undertaken annually since 2007 for assessing states’ experiences and challenges, mid-course corrections, and program strengthening.¹ The CRM reports are important knowledge resources enabling status assessments of several health system domains within and across Indian districts and states.

Given the objective to understand the determinants of access to medicines in the Indian public health system, the CRM reports between 2007 and 2021 were reviewed. All

findings relevant to medicines were identified, retrieved, and analysed. Core themes pertaining to medicines were identified and each theme was analysed to deduce the context-specific determinants influencing their availability and accessibility in the public health system. The findings were appraised for relevance and validated for aptness by comparing the recent reports with the former ones to ascertain their contextual underpinnings. Core themes in the Indian Public Health System, their interlinkages and key determinants for ensuring access to medicines are discussed below.

PREVALENT STATE MECHANISMS FOR PROCUREMENT OF MEDICINES

In India, procurement of medicines is coordinated through various mechanisms such as state- level autonomous bodies, state government- owned agencies, procurement division/cell of the state government, and public-private partnership arrangements. State- level autonomous bodies and state government- owned agencies are empowered to procure and distribute 80 per cent to 100 per cent of medicines and diagnostic products of the total requirement. Additionally, existing resources like untied funds or funds from rural/urban local governing bodies support the facilities to undertake local purchases to meet emergency demand or

shortages. While the procurement mechanisms are usually centralized, logistics and distribution are widely channelized through regional and/ or district- level distribution centers like warehouses, central medical store depots or district medicine stores.

Over the years, it has been noted that states with autonomous bodies for procurement demonstrate relatively improved governance, decreased wastage, improved availability of quality medicines and less burden on end-users in terms of out-of-pocket expenditure (OOPE). The latter models face relatively more constraints to meet district-level demands, often resulting in delays and disproportionate local purchases. Even among states with procurement bodies, their efficiency in achieving desirable outcomes is tied to state-specific customization of the procurement and distribution system.

SUPPLY CHAIN MANAGEMENT PRACTICES

Supply chain management (SCM) is the regulation of the flow of goods, finances, and information related to products or services spanning from procurement to distribution to the end-users. Efficient SCM practices are important to ensure the timely distribution of the right products in the right quantity at the right place. In the Indian public health system's context, it has become evident that the organization and functioning of existing systems are more robust when backed with state-specific medicine (drug) policy, essential medicine list across levels of care, procurement policy with flexible financial and purchasing empowerment of the districts and healthcare facilities, policy on free medicines and strategies on distribution, and apportionment of stocks across facilities to minimize wastage.

Through the years, some SCM practices are identified to stand out as desirable and cost-effective. These include procurement based on essential medicine list formulated through multi-stakeholder consultations, scientific demand forecasting, transparent tender and bidding system on rate contracts; having checkpoints (e.g. penalty clause, blacklisting) for compliance; and concurrent logistics and distribution practices. Additionally, the use of IT-based platforms for procurement and inventory management (i.e., storage, quality testing, tracking, monitoring, and allocation based on consumption patterns across the empaneled health facilities) are pivotal for a highly responsive and accountable system.

SCM practices vary across the states. While in a few, they are observed to be efficient (e.g., Tamil Nadu, Kerala, Rajasthan, Andhra Pradesh), challenges reported in many states are largely due to implementation gaps confounded by other systemic challenges. They stem from normative or empirical demand forecasting, fragmentation of procurement sources (e.g., state civil supply, Jan Aushadi outlets, local purchases), outsourcing procurement to agencies lacking technical competency, non-compliance of suppliers (quantity/ quality of medicines or stipulated time frame), and absence of compliance checkpoints.

The lack of well-established linkages between procurement and logistics often results in inefficient inventory

management practices (temperature control, storage space, adherence to stock movement protocols, IT- enabled inventory management). Additionally, poor quality assurance mechanisms (empaneled labs for testing, accreditation, timely reporting), and insufficient supply down to the district and peripheral level facilities were observed in some states.

HEALTH SYSTEM FACTORS INFLUENCING SUPPLY CHAIN OF MEDICINES

INFRASTRUCTURE

Adequate infrastructure is one of the prerequisites for efficient storage and distribution of medicines. Progress in the direction of infrastructure expansion and strengthening improves both service delivery and availability of medicines for the end-users. When faced with challenges of infrastructural shortfall to store and dispense medicines, a few states reported adopting alternative measures to ensure the distribution of medicines. They include the diversion of medicines' demand and supply from healthcare facilities to generic medicine stores, corporative medicine stores, fair price shops (e.g., Jan Aushadi Kendra, Jan Aushadhalaya, Red Cross stores, Jeevan Dhara, Karunya Community Pharmacy) or to private pharmacies within or near the premises of healthcare facilities. However, these measures yielded differential outcomes for the end-users. For instance, there were reports of users facing constraints in accessing medicines at these pharmacies due to stock out of generic medicines and distribution of near-expiry or expired medicines and branded medicines, which invariably resulted in OOPE.

HUMAN RESOURCES

Access to essential medicines is directly linked to and positively facilitated by the availability of adequate human resources for health in the public health system (ASHAs/ CHWs, ANMs, Doctors, Specialists, Pharmacists). The availability of skilled personnel is crucial for the utilization of existing infrastructure, service delivery and demand generation. Interim strategies like rational deployment and multi-skilling of the workforce have been widely practiced to address HRH shortfalls. However, their effectiveness and retention are observed to be associated with the availability of needed infrastructure, streamlined supplies, quality training, and opportunities to hone their skills.

Besides adequate HRH being one of the prime determinants for ensuring services and medicines, the plurality of job roles across the cadres brings out additional aspects for inspection and redressal. Learnings from states indicate that the ability of the community health workers to deliver community-based services (e.g., HBNC) is dependent on timely and adequate supply of medicine kits. Likewise, cost-effective, affordable, and quality services are linked to mechanisms promoting rational and scientific prescription practices of authorized providers. Capacity building of skilled cadres across the levels of care like facility-in-charge, store-keepers, ANMs and pharmacists in inventory/

material management, demand estimation, and indenting is required to support their state-specific practices.

However, lack of prioritization for replenishment of ASHA/CHW medicine kits, prescriptions filled at a pharmacy external to the public health facility, prescribing outside the EML, inadequate dosage for chronic illnesses, irrational antibiotic prescription, over-prescription, unscientific treatment duration, and skill-gap of facility level workforce in store and material management were identified. Some of these practices reportedly originated as ad-hoc measures in the service delivery chain and continued in the absence of root-cause mitigation efforts; while some continue to exist due to the lack of capacity building measures. They are relatively more prevalent in primary healthcare facilities and community health centers than in district hospitals.

Though most of the states reported similar challenges at some point, over time those states who targeted systemic redressal through increased financial allocation for medicines, formulation of EML, promotion of generic medicines, issuance of guidance notes on prescription practices, institution of prescription audits, and strategies for capacity building of HRH across the levels of care were able to ensure relatively improved access to quality and affordable services and medicines.

CONVERGENCE OF NATIONAL HEALTH PROGRAMMES

In the first decade of NHM implementation (2005–2014), medicines under various national health programmes (RNTCP/NTEP, NACP, NVBDCP, NLEP, RMNCH+A) were sourced through the programmatic budget heads and channels. In view of programmatic targets, states had even addressed the determinants of accessing free medicines such as free transport, testing, meals to patients/attendants, and wage loss compensation. Over time, procurement under the vertical programmes has been gradually absorbed into the state-specific system for routine services.

Streamlined procurement and distribution is a key determinant for access. However, intrinsic systemic factors contributing to delays, inaccurate demand estimation and supply of short- expiry medicines cause shortages and stock-out of medicines under the vertical programmes too. Additionally, barriers in communication and coordination between the states, districts, healthcare facilities, and procurement bodies cause duplication of purchases. The challenges are reportedly more pronounced in North-Eastern states and for facilities under the National Urban Health Mission (NUHM).

In addition to streamlined procurement and communication channels, systematic reporting across the programmes is pivotal in aligning the demand for medicines with the state's disease burden. For chronic conditions, the pace of NCD services uptake, especially at primary level healthcare facilities significantly influences demand-driven access to NCD-specific essential medicines.

FREE DRUG SERVICE INITIATIVE AND COMPREHENSIVE PRIMARY HEALTH CARE

In the years of NRHM (2005–12), a few states like Kerala, Assam, and Jharkhand already had state policies for free services and medicines for BPL families. Under the NCD control programme, medicines were first made available free of cost in the states like Kerala and Tamil Nadu. After the launch of NHM (subsuming NRHM and NUHM), most of the states adopted a policy for free medicines in public health facilities, which gradually brought down the OOPE on medicines.

Prior to that, the state level commitment for free medicine policy had been differential. Fund shortages pushed states to appropriate budget heads under benefit schemes (e.g., Janani Shishu Suraksha Karyakaram- JSSK) or use revenue from services like diagnostics to ensure the provision of free medicines, thereby shifting the burden to other determinants of OOPE. In most of the states, free medicines were restricted to targeted beneficiaries like BPL families, beneficiaries of JSSK, Janani Suraksha Yojana (JSY), and enrollees of state-specific insurance schemes. Even among the beneficiaries, the range of medicines given free of cost was not as per the EML nor based on epidemiological load.

Learnings across the states paved the way for the launch of Free Drugs Service Initiative (FDSI) in 2015 to ensure universality of access to free and quality medicines, irrespective of socioeconomic status.² The mechanisms intend to incentivize and support states to address all systemic requirements in ensuring the free provision of medicines to all users of public health facilities, especially at the primary level. Having achieved pan-national notification of FDSI² complemented by the roll-out of Comprehensive Primary Health Care (CPHC) through HWCs,^{3,4} prioritization and demonstrable commitment by the states are crucial to expedite the progress in ensuring universal access to free essential medicines and bring down the OOPE incurred on medicines.

IT- BASED SYSTEMS

Supply chain management practices backed by IT-based platforms have shaped estimation, tracking, and monitoring practices for medicines, equipment, and consumables in the Indian health system. Early implementation of such platforms is identified as a key determinant to promote skill development and skill refinement among trained users, allowing the states to gradually saturate and establish them throughout. Inefficiencies like prolonged lead-time, stock out, and medicine expiration which is still reported in states with established platforms are due to a lack of requisite modules (e.g. forecasting, e-prescription), lack of real-time monitoring of consumption pattern and stock position, and poor hardware and software support arrangements, especially at primary level healthcare facilities. Adding to that, in siloes operation of various IT-based platforms like the medicine-module of Health Management Information System (HMIS), Drugs and Vaccines Distribution and Management System (DVDMS), Nikshay (TB), Inte-

grated Disease Surveillance Programme (IDSP), Sanjeevani and the like, further compound the existing SCM challenges.

PROVIDER AND COMMUNITY SENSITIZATION

Policy articulation and dissemination of guidelines at the national level along with state-specific measures like formulation of essential medicine list (EML), prescription guidance, and dissemination of standard treatment protocols/ guidelines (STPs/STGs) aid in ensuring appropriate quality of services and resource-efficiency. Early issuance of guidance notes on the prescription of generic medicines, clarity in dispensing rights, state notification of FDSI, and mandated display of EML at the facilities heighten the awareness of both providers and community members. In line with this, irrational prescriptions and poor adherence to STPs/STGs and EML may be attributed to lack of awareness.

WAY FORWARD

The Common Review Missions serve as a platform to not only highlight various state level experiences but also signal the way forward to overcome systemic challenges in access to essential medicines. Effective systems are those which are not only apprised of local and aggregate demands for medicines but also have commensurate capacities to meet the demands. In this regard, the government of India has revised the national list of essential medicine to also include a newer range of services to ensure that healthcare facilities are equipped to provide services aligned with changing health needs.⁵ Likewise, states need to update their EMLs customized to their needs.

State experiences highlight the importance of an established IT-enabled supply chain management system. The designed digital architecture of SCM should not only facilitate maximum utility but also prioritize interoperability, real-time data management, and monitoring through a centralized dashboard in each state.

While it is essential to prioritize streamlining procurement mechanisms, it is equally important that such provisions effectively translate to better access and availability of medicines across all levels of care. The state experiences underscore the need towards establishing robust tracking mechanisms for the efficient utilization of resources. This would not only contribute to increased demand generation but also mitigate the burden of accessing quality medicines and consequent financial hardship.

Given the interlinkages within various systemic processes, a move towards improving access to essential medicines must be subsumed under overall health systems strengthening across the states. In addition to this, targeted approaches - like institution of state medicine and therapeutic committee, mandating prescription audits and adherence to STGs, monitoring of Key Performance Indicators, undertaking periodic patient satisfaction surveys, and

operationalizing functional grievance cells – improve the system's accountability and responsiveness. Education curricular changes sensitizing providers on generic medicines, rational prescription, STGs/STPs, and continuum of care can mitigate undesirable practices.

CONCLUSIONS

Diverse systemic determinants of access to quality and affordable medicines have been documented through CRMs. Though not an exhaustive list, state-specific experiences over the years highlight the determinants of access, and pertinent systemic challenges needing redressal. Given the role of various interlinking factors, states need to establish robust procurement systems, strengthen the existing infrastructure, ensure adequate HRH backed with robust HRH policy, expand the range of services, and strengthen CPHC for supporting holistic efforts. An overall health system strengthening is the way forward to expedite the realization of universal access to free essential medicines at public health facilities. This is imperative for the attainment of universal health coverage.

FUNDING

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

AUTHORSHIP CONTRIBUTIONS

ND and EH conceptualized, designed and defined the intellectual content of the study. NB contributed to literature search and data acquisition. EH, NB and ND contributed to manuscript preparation, editing and review. ND and AK critically reviewed and finalized the paper. The manuscript has been read and approved by all authors.

DISCLOSURE OF INTEREST

The authors completed the ICMJE Disclosure of Interest Form (available upon request from the corresponding author) and disclose no relevant interests.

CORRESPONDENCE TO:

Dr Neha Dumka,
Lead Consultant- Knowledge Management Division,
National Health Systems Resource Centre,
National Institute of Health & Family Welfare Campus,
Baba Gang Nath Marg, Munirka
New Delhi, Delhi 110067, India
E-mail: drnehadumka@gmail.com

Submitted: May 03, 2023 GMT, Accepted: July 10, 2023 GMT



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

REFERENCES

1. Common Review Mission :: National Health Mission. Accessed September 29, 2022. <https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=795&lid=195>
2. Free Drugs Service Initiative | National Health Systems Resource Centre. Accessed August 22, 2022. <https://nhsrcindia.org/free-drugs-service-initiative-0>
3. Official Website Ayushman Bharat | HWC. Accessed August 23, 2022. <http://ab-hwc.nhp.gov.in/>
4. Ayushman Bharat - Comprehensive Primary Health Care through Health and Wellness Centres: Operational Guidelines. Accessed April 12, 2022. <http://ab-hwc.nhp.gov.in/download/document/45a4ab64b74ab124cfd853ec9a0127e4.pdf>
5. National List of Essential Medicines (NLEM), 2022 | Ministry of Health and Family Welfare | GOI. Accessed September 29, 2022. <https://main.mohfw.gov.in/newshighlights-104>