EXECUTIVE SUMMARY

The issue of access to medicines assumes critical importance in low- and middle-income countries, as it has larger implications for health outcomes and financial risk protection in such countries. Despite India being referred to as the “pharmacy of the global south”, access to essential medicines is still elusive to a large segment of its population. Some of the key barriers that act as impediments to access include gross inadequacy of government spending on health care in general and on medicines and vaccines in particular, resulting in high out-of-pocket (OOP) payments by households; inefficient procurement systems and ineffective medicine distribution mechanisms; unaffordable market prices; and irrational prescription, dispensing and use of medicines.

Realizing the importance of access to medicines, the Rajasthan government initiated the *Mukhyamantri Nishulk Dava Yojana (MNDY)* (Chief Minister's Free Medicines Initiative) in October 2011. Some of the key features of the scheme are: significant scaling up in public spending on medicines; setting up of the Rajasthan Medical Services Corporation to procure essential medicines and coordinate supply chain systems; establishing medicine storage and transparent distribution warehouses in each of the districts; procurement based on a two-bid system involving technical and financial tenders; distribution of medicines based on a two-passbook system to ensure uninterrupted supply of medicines and supplies to the frontline health facilities from district medicine warehouses; setting up an *'e-Aushadi'* platform, an advanced electronic inventory management information system, to facilitate smooth functioning of the entire value chain from procurement to distribution of medicines; and multiple layers of quality control mechanisms to promote efficacy and safety of medicines dispensed in the system.

Since the MNDY scheme is expected to have significant implications on several outcome measures, a robust evaluation of the scheme was considered necessary. Utilizing both primary and secondary data and information, the scheme was evaluated by examining the process and outcome indicators. Adopting a two-stage stratified sampling method, a survey of a large sample of 112 public health facilities in Rajasthan was carried out. Besides, the passbook database was used to understand several facets of the scheme. The Rajasthan Government's commitment is already visible with a substantial step up in allocation of funds. During 2013–14, a sum of 3200 million Indian rupees was allocated towards the scheme as against a much lower 760 million Indian rupees in 2011–12. The per capita health expenditure before the MNDY scheme was estimated to be ₹5.70 which now stands close to ₹50. 50. This has had a salutary effect on OOP reduction in the State. Early trends suggest that households' OOP payments have declined from 85% in 2004–05 to nearly 75% in 2011–12. Impoverishment caused due to high households' OOP expenditure on medicines have reduced from 3.2% to 2.1%, even though given that these results are at an early stage, we may not be able to conclusively attribute these solely to the MNDY. Allocation of funds to districts has improved dramatically, while inequality in distribution of funds across different levels of care has reduced considerably.

One of the immediate and positive spin-offs from this initiative is the rapid increase in outpatient visits and considerable increase in inpatient admissions. The combined outpatient and inpatient care visits rose quickly from 3.5 million in July 2010 to 7.8 million in July 2013. This unprecedented upsurge in patient visits could be partly due to an 'explosion' in the pent-up demand. As medicines are now available free of cost, absenteeism appears to have reduced considerably, putting pressure on the health system infrastructure to improve further. As a result, frontline public health facilities are experiencing exuberance. Acute shortages and chronic stock-outs, the hallmark of the pre-MNDY regime, have given way to far greater availability and accessibility of medicines. The survey found that the average availability of essential medicines has improved significantly, with an average of 100 essential medicines being available at the primary health centre on the survey day. The numbers for community health centres and district hospitals are around 180 and over 300, respectively.

The MNDY is also expected to influence prescription and dispensing patterns. The survey finds that on an average, 3.34 medicines are prescribed across different facilities. Of all prescribed medicines, 97.3% of the medicines were prescribed using generic names, while 86.3% of the medicines that were prescribed were of single formulations medicine as against fixed-dose medicine combinations. Antibiotics formed 30% of all the prescribed medicines. Injectables constituted 6%, liquid preparations including syrups constituted 8% and vitamins constituted 3.6% of the total preparations dispensed in public health facilities.

In general, RMSC prices did not differ by large margins from Tamil Nadu Medical Services Corporation Ltd. (TNMSC) rates; the majority of RMSC rates were within a 25% range of TNMSC rates. In fact, TNMSC rates were higher than RMSC rates for 19 medicines. As far as RMSC prices are concerned, weighted mean market prices are on average 300% higher than RMSC prices. In a few cases, RMSC rates are higher than the market price such as for anti-snake venom, factor fraction VIII, sodium chloride and dextrose injection. However, the relatively small number of suppliers for these formulations in the open market may be indicative of less competition in the specific medicine markets and somewhat limited scope for improving the public procurement rate.

The two-year experience of MNDY points to an overall improvement in utilization of government health services, availability of medicines at facilities, some turnaround in financial risk protection and health system expansion. The efficiency of the procurement process has significantly improved, while delivery of medicines and supplies has been made very effective. While the underlying reforms associated with accelerated investment are a bold and innovative step, there is need to emphasize its sustenance. Rather than treating it as a one-off project-based initiative, the Government of Rajasthan must endeavour to institutionalize these reforms. The experience and evidence generated from this study clearly suggests a replication and rapid scale up of such a model in other states, aimed at progressing towards more efficient medicine procurement and distribution.