CHAPTER 9

CONCLUSIONS AND WAY FORWARD

9.1 CONCLUDING OBSERVATIONS

This study was intended to evaluate the MNDY scheme by examining the processes and outcome measures. A two-stage stratified sampling method was adopted, and a survey of 112 public health facilities in Rajasthan was carried out. In addition, the passbook database of RMSC was utilized to understand several facets of the scheme. Several crucial aspects of the scheme’s inputs were studied: the procurement processes and patterns, trends in public investments on medicines, the quality assurance process, supply chain management processes and the storage system and processes. In terms of outcomes, the study included: trends in outpatient and inpatient visits, impact on private spending on drugs, availability and stock-out of drugs, price variations in the procurement process, and prescription patterns.

The significant increase in outlays on medicines since the introduction of RMSC has been very encouraging. During 2013–14, a sum of 3200 million Indian rupees was allocated towards the scheme as against 1020 million Indian rupees in 2011–12. The State was spending less than 5% of its public expenditure on medicines in the pre-MNDY years. This has increased considerably since the launch of the scheme. The per capita health expenditure during the pre-MNDY era was estimated to be ₹ 5.70 which now stands close to ₹ 50. This has had a salutary impact 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 appears to have reduced from 3.2% to 2.1%. Allocation of funds to districts has improved dramatically while inequality in distribution of funds across different levels of care has reduced considerably.

The rapid increase in outpatient and inpatient visits is a welcome sign for the public health system in Rajasthan. The combined outpatient and inpatient care visits experienced a rapid upswing from 3.45 million in July 2010 to 7.78 million in July
2013. As per estimates, around 11 million people were served at OPDs during 2011. This is expected to triple by 2013, as by June 2013 estimated OPD visits in PHCs had already increased to 15.8 million. The unprecedented upsurge in patient visits is caused partly by the explosion in the pent-up demand and also has the potential to trigger a cascading effect within the public health system in Rajasthan.

As medicines are now freely available, staff absenteeism appears to have reduced considerably, putting pressure on the health system infrastructure to improve further. The public health facilities have reported less shortages and stock-outs. The survey demonstrates that the availability of essential medicines has improved significantly. The average availability of essential medicines is 100 medicines at a PHC, 180 at a CHC and over 300 essential medicines at a district hospital. This is as per the data collected on the day of the survey. This median availability of drugs at PHCs, CHCs and district hospitals is 70%, 67% and 85%, respectively. The figure for stock-out days is quite low; and apart from a few medicines at particular levels, none have stock-outs of more than 30 days. An average stock-out of 12 days at the PHC level is considered very low compared to most developing country standards. Very low levels of stock-outs also suggest that most of the systemic deficiencies are being taken care of and efficiencies have been successfully brought in the supply chain. While analysing the budget data, it was seen that a progressively higher amount of funds are being spent on medicines in the State. However, the increase in spending is absorbed mostly at the tertiary level. This leaves further scope of improvement at the PHC level, where HR shortages are the most glaring. It is noted that RMSC has started procuring as many as 600 plus medicines, a large portion of which go towards tertiary care. Of the 442 medicines procured till 2012, only 32 were exclusively for medical colleges (7%), whereas the current list has 84 medicines (16.5%) for the highest level of care.

The ABC analysis of disbursement of drug value shows that out of 442 medicines distributed by RMSC during 2012–13, 89 (20%), 113 (26%) and 240 (54%) drug items are category A, B and C items, respectively, accounting for 80%, 15% and 5%, respectively of the value. One area of concern remains that the value of medicines disbursed in 2012–13 is inclined to a particular therapeutic category (ATC J), consisting anti-infectives for systemic use, across all levels of care. On an average, at all levels of care, these comprise 50% of the value of all medicines disbursed. Further disaggregation of this particular therapeutic category shows that amphenicols (J01C) and other β-lactam anti-bacterials (other than penicillin) accounted for 50% of the value of medicines disbursed across all levels of care. The
rationale behind such a high use of anti-bacterials can be a further research question, especially at lower levels of care.

The Scheme is also expected to influence prescription and dispensing patterns. Our survey finds that on an average, 3.34 medicines are prescribed across different facilities. Among all the prescribed medicines, 97.3% of the medicines are prescribed using generic names, while 86.3% of the medicines prescribed were of the single medicine category as against fixed medicine combination. Antibiotics occupied 29% of all the medicines that were prescribed in the State, injectables were 7% and syrup preparations were 9% of the total preparations dispensed in public health facilities. The prescription analysis shows that use of vitamins (3.6% of total preparations) was quite low, an encouraging trend from the perspective of rational use of medicines.

As far as procurement prices are concerned, the RMSC rates did not differ by large margins from 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. It may also be observed that the market prices are on average 300% greater than RMSC prices. In a few cases, RMSC rates are higher than the market price, such as for anti-snake venom, factor VIII fraction and 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 the somewhat limited scope for improving the public procurement rate. The comparison of RMSC prices and market price shows the possible cost savings and efficiency gains through a centralized system whereby government acts as a monopolist to procure at a lower rate. The analysis of the procurement process shows that more than two third of the medicines procured had more than three bidders, suggesting adequate interest and competition among manufacturers. The checks and balances incorporated in the RMSC procurement system and demand estimation process at the beginning of the year are also allowing the government to avoid possible shortages in supply.

The 2-year experience of MNDY points to an overall improvement in health outcomes, 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 a need to emphasise 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 points to the need for replication and rapid scale up of such a model in other states, endeavouring to make progress in medicine procurement and distribution.

Our ABC analysis of medicines distributed in the public health facilities underlines the need for taking a hard look at the consumption pattern, since a large share of the budget appears to be utilized for procuring and dispensing anti-infectives for systemic use. A systematic and a sustained prescription audit may be required at the facility level to contain overuse of antibiotics.

9.2 SURVEY CONCLUSIONS WITH REGARD TO UNIVERSAL HEALTH COVERAGE IN INDIA

The Millennium Development Goals (MDGs) clearly acknowledge the need to improve access by the poor to essential drugs on a sustainable basis. Essential pharmaceuticals in UHC have to be seen in the context of proper quality, availability, prices and procurement systems. A reliable supply of pharmaceuticals and consumables, good diagnostics, technologies such as information and communications technology (ICT) and other technologies as well as health facilities (PHCs, clinics, hospitals, etc.) are all also crucial. However, assured access to essential medicines can only occur when there is government commitment, adequate public sector financing, careful selection, efficient procurement and distribution systems and up-to-date information about the availability and affordability of medicines at the point of care. This complex web of activities requires cooperation between the public and private sectors, prescribers and dispensers, and between different government institutions.

When medicines are not available in the public sector, patients are forced to purchase medicines OOP from the higher priced private sector, or forgo treatment altogether. Such expenditure is the main reason for the catastrophic and impoverishing health costs in India. Therefore, essential medicines which satisfy the priority health-care needs of the population should be made available within the context of the health system at all times in adequate amounts, in appropriate dosage forms, with assured quality and at a price the individual and the community can afford.
As brought out well by the High Level Expert Group on Universal Health Coverage (2012), many Indian states spend too little funds on medicines to allow for sufficient improvements in public health service provision. There is a clear need for states to substantially increase not only their health expenditure but also medicine expenditure.

To increase access to medicines in public health facilities requires setting up systems to make a substantial list of medicines available at affordable costs to society. Managing medicines supply for an entire state is a daunting task and requires substantial professional expertise that can only be built up over time, and with high-level financial, bureaucratic and political support. Tamil Nadu has built such a system over many years, and now Rajasthan has also demonstrated that it is possible to build such a capacity and infrastructure, albeit with several years of preparation and capacity building. The expertise and staff experience of both Tamil Nadu and Rajasthan can be used to support and build capacity in other states of India.

This report describes the developments and (intermediate) results of the Rajasthan MNDY system in great detail. The main achievements are: expenditure on essential medicines went up (tenfold); impoverishment due to medicines went down by one third; attendance at health facilities went up by two to three times and made public health care much more attractive for patients (as a result of which staff became more responsible and responsive); and medicines availability went up and stock-outs went down, substantially improving access to medication.

As often happens when a new system is installed, new challenges appear – largely thanks to better information becoming available. The increase in medicines spending went more to the tertiary level and less to the primary care level. This may be expected to change over time, as (a) a large proportion of patients are served at higher levels of care for their OPD medicines, and (b) people may have to get used to medicines being available in primary care facilities. The other remarkable finding is the concentration of costs in one therapeutic area “anti-infective for systemic use” (ATC J). A positive aspect is that such data on medicine use is now available and can be further analyzed. Another finding of the survey suggests that several rational drug use indicators are at quite an acceptable level. This is likely to be the result of substantial training, information provision and capacity building by the RMSC during the build-up and introduction of the MNDY scheme. In comparison to other central
medicine procurement schemes (in India and abroad), RMSC has invested heavily in the clinical side of medicines supply and in treatment guidelines. It is obviously paying off and will reduce irrational prescribing and wastage of scarce resources. Within the common goals of UHC, the achievements to date of Rajasthan (and other states with similar systems and initiatives) are a clear signal that taking up of procurement and supply chain management of medicines supply as the first action point is improving the attractiveness of public health care, reducing the financial burden on the population and improving the working conditions and professionalism of the public health staff. While medicines supply has reached a sustainable level in Tamil Nadu, Rajasthan now has to demonstrate that it has also developed a sustainable system. To achieve this, continued political support is required.

Rajasthan, Tamil Nadu and several other states have also demonstrated that good management and the right organizational set-up are critical success factors. To adequately manage medicines supply, a dedicated organization solely focused on this important task is needed.

To ensure that similar initiatives in improving access to medicines take root in other states, lessons from successful implementation should be shared with the ministry of health of all states of India. Common challenges that can be addressed for each function of the medicines management system are as follows:

- A well-functioning IT system to manage the procurement, distribution, warehousing and dispensing of medicines is the backbone and a critical success factor. Investments in such a system are a necessary precondition for any access to medicines initiative.
- Estimation of the real requirements for medicines as per the level of care is difficult as attendance grows unevenly. Initial under- or over-supply is unavoidable.
- Access to medicines should prioritize primary care to allow more people to benefit (especially the poor), to prevent patients seeking medication at higher levels of care, and to encourage primary-care physicians in their professional practice.
- Selection of medicines from the state essential drug lists and compliance with standard treatment guidelines are necessary to ensure that the most cost-effective treatment is provided to improve treatment results, and to reduce costs for the state.
• Competitive bidding procedures are now common in procurement of medicines. However, more flexible arrangements are needed to allow cost-effective procurement of low volume and slow moving items, and to increase flexibility in the delivery schemes (quarterly deliveries based on needs) to reduce intermediate stock levels.

• The state level regulatory authorities should be strengthened in terms of manpower, capacity building and quality management systems. Quality assurance of medicines is an integral part of drug management. Successful programmes like Rajasthan, Tamil Nadu and others have made quality assistance and laboratory testing of samples a daily routine that is integrated in the supply chain. Quality control requires additional investments in equipment, facilities and staff. This must be taken care of from the beginning. Quality should never be compromised if one is to ensure continued trust in the medicines supplied.

• Increasing the use of quality-assured generic medicines could be a key strategy for improving the affordability of medicines. A range of policy options is available to promote the use of generics, including fostering and developing generic medicine policies and advocacy for their dissemination and use.

• Once medicines supply systems are in place, new tasks emerge. Logistic optimization is only possible once the system is filled with products and material flows are operational; efficiency gains can be achieved only then. The quality of the drug supply system itself (good practices) also needs further attention and improvement once systems are in place. Capacity building in medicines supply management at all levels needs to be taken to higher levels by continuous training which is embedded in the annual routine.

Rajasthan, Tamil Nadu and a few other states have demonstrated that access to medicines can be improved substantially with the right mix of technical skills, funding and political will and support. To contribute further to achieving UHC, access to medicines should move from being a political issue towards being a public health precondition.25,26