Chapter-IV
Availability of Drugs, Medicines, Equipment and Other Consumables

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Shortfall of essential drugs was noticed in the Government Medical Institutions of the State. The reasons contributing to this shortfall were the shortage of the drugs at the warehouses and inadequate supply of medicines to Government Medical Institutions by drug warehouses against their demand. Other reasons included delay in finalizing and renewal of Rate Contracts and delay in issuing Purchase Orders for supply of medicines. There were delays in the supply of ordered drugs by the vendors as well.

Significant delays were noticed in the Quality Assurance process which contributed to the overall delays in the supply of drugs to the Government Medical Institutions. While the drug warehouses sent the drug samples for testing with delays, the testing laboratories also failed to furnish the quality test reports within the prescribed time limits. Instances of local purchase of drugs by the Government Medical Institutions without the batch test reports were also observed.

There was significant shortfall in availability of essential equipment against IPHS at the test-checked District Hospitals, Sub-district Hospitals, Community Health Centres and Primary Health Centres. Scheduled preventive maintenance and calibration of equipment were not carried out as per the requirements. There were delays in the prescribed verification of equipment by the Medical Officer in charge of the Government Medical Institutions. Instances of non-functional/idle equipment due to lack of trained manpower, non-availability of spare parts, etc. were also observed.

4.1 Introduction

The GoR set up the Rajasthan Medical Services Corporation Limited (RMSCL), a State Public Sector Undertaking, on 4 May 2011 as a centralised procurement agency for procuring generic medicines, surgical and suture items and medical equipment at the most economical cost for all the Government Medical Institutions of DMH&FW and DME. The RMSCL has its own warehouses throughout the State for storing and distribution of drugs to medical institutions.

The requirement of drugs, medicines, surgical and suture items and equipment are finalized by both Medical Directorates, i.e. Medical Education and Medical and Health Services, every year for centralised procurement by RMSCL. Need based procurement of drugs, surgical and suture items and equipment is made at State level by RMSCL. Thereafter, the drugs are delivered and stored at District Drug Warehouses[75] (DDWs) located in each district and Medical College Drug Warehouses[76] (MCDWs). The quality of drugs and surgical and

75 34 DDWs in the State: One DDW each in 32 districts and two DDWs in Jaipur district.
76 Six Medical College Drug Warehouses at Ajmer, Bikaner, Jaipur, Jodhpur, Kota and Udaipur in the State.

suture items is ensured through empanelled drug testing laboratories and after quality testing, these are issued to sub-stores of various Government Medical Institutions of the district as per their requirements. The drugs are finally distributed to the patients from Drug Distribution Centres (DDCs) of Government Medical Institutions.

The activities of RMSCL play a crucial role in the day-to-day functioning of the Government Medical Institutions. Two web applications (***e-Aushadhi***[77] *&* ***e-Upkaran***[78]**)** for centralized inventory management are being used for monitoring of drugs and management and maintenance of equipment. Process flow charts of *e-Aushadhi* and *e-Upkaran* are given in ***Appendix 4.1***.

4.2 Availability of Drugs and Medicines

4.2.1 Availability as reflected in e-Aushadhi System

The RMSCL, as the central procurement body, centrally procures drugs and medicines included in the Essential Drug List (EDL) to be supplied to the Government Medical Institutions for free distribution to the beneficiaries under the *Mukhyamantri Nishulk Dawa Yojana* (MNDY[79]). Number of drugs and consumables in the EDL (as on 11 March 2022) at the various medical units are as follows:

- Primary Health Centres - 414
- Community Health Centres - 635
- District Hospitals - 844
- Medical College Hospitals - 969

The availability of these essential drugs and consumables at the various medical units at any point of time can be seen on the "Medicine Availability Tracker"[80] of *e-Aushadhi* web portal. Audit assessed the availability of these essential drugs at all the medical units of the State as on 11 March 2022 and observed that in 27 *per cent* of the PHCs, the availability was less than 50 *per cent* of the listed drugs, as shown in **Table 4.1** below:

77 *e-Aushadhi* is a web-based application of RMSCL which deals with the management and supply of stocks of various drugs, medicines, sutures and surgical items required by GMIs in Rajasthan.

78 *e-Upkaran* is a web-based application of RMSCL which deals with management and maintenance of equipment and instruments of GMIs in Rajasthan.

79 Launched in 2011.

80 Medicine Availability Tracker is a report of *e-Aushadhi* for tracking the stock position of drugs and medicines in the GMIs of the State.

Table 4.1: Availability of essential drugs and consumables at medical units as on 11 March 2022

Essential Drug availability in percentage	No. of PHCs[81] (availability against prescribed 414 drugs)	No. of CHCs (availability against prescribed 635 drugs)	No. of DHs (availability against prescribed 844 drugs)	No. of MCHs (availability against prescribed 969 drugs)	
				MCHs	Women/Mother & Child Hospitals
Less than 25 *per cent*	67	4	0	9	1
25 *per cent* to 50 *per cent*	591	101	0	9	5
50 *per cent* to 75 *per cent*	1,063	410	21	20	2
More than 75 *per cent*	682	169	10	4	0
Total No. of GMIs	**2,403**	**684**	**31**	**42**	**8**

Source: e-Aushadhi data provided by RMSCL.

The above Table shows that 15 *per cent* of the CHCs had less than 50 *per cent* of the essential drugs and consumables.

The availability was slightly better at the District Hospitals. All District Hospitals had more than 50 *per cent* availability of essential drugs and consumables.

The shortfall of essential drugs was found to be highest in the Medical College Hospitals as in 43 *per cent* of these hospitals, the availability was below 50 *per cent*. Availability of drugs was lowest in Medical College attached Women/ Mother and Child Hospitals as in 75 *per cent* of these hospitals, the availability was below 50 *per cent*.

The State Government stated (January 2024) that on the basis of demand and feedback received from the GMIs, RMSCL regularly issued purchase orders for continuous supply of drugs and medicines at drugs warehouses. It was further stated that in case of delayed supply by supplier or non-availability of rate contract, GMIs concerned after obtaining Non-Availability Certificate from drugs warehouses procure drugs through local purchase.

The reply is not tenable as 50 *per cent* less availability of drugs and medicines were noticed in 27 *per cent* PHCs, 15 *per cent* CHCs and 43 *per cent* Medical College Hospitals and 75 *per cent* in Mother and Child Hospitals which shows that continuous supply of drugs were not ensured by RMSCL.

Audit is of the opinion that the State Government may utilise the savings under provision for healthcare as mentioned in Paragraph 6.2 of the report to enhance the purchase of Drugs and Medicines with a view to address the shortages.

81 Includes PHC and Urban PHC (UPHC).

4.2.2 Assessment of availability of medicines based on prescriptions

According to the directions of GoR (July 2013), the drugs which could not be made available to the patients in the GMIs as per the patient voucher (prescription slip) were to be mandatorily entered in the *e-Aushadhi* system as 'NA Hits' (Not Available drugs).

For independent verification of the availability of drugs reflected in the *e-Aushadhi* system, Audit test-checked 153 prescription slips issued at various medical units during the five-year period 2017-22. In these slips, a total of 581 drugs were prescribed to patients. In 66 prescription slips (43 *per cent),* the prescribed medicines were not available, out of which in 21 (14 *per cent*) cases, the non-availability of the prescribed drugs was not entered as 'NA Hits' in the *e-Aushadhi* system.

The above fact raises questions over the veracity of the data regarding availability of medicines and has an impact on the demand projection of medicines as reflected in the *e-Aushadhi* system.

The State Government stated (January 2024) that in case a particular drug is not available then if any substitute is available, are made available to the patients by the GMIs. It was further stated that in case where substitute is not available then after obtaining Non-Availability Certificate from the Drug Warehouse, drugs are being procured through local purchase by GMIs. It was also stated that instruction have been issued regularly for ensure availability of drugs at GMIs.

The shortfall of medicines in Government Medical Institutions pre-dominantly affects poor people as they are mainly dependent on government hospitals for their healthcare needs and as such the State Government may take suitable steps to ensure adequate availability of medicines in Government Medical Institutions.

4.3 Reasons for Non-availability of Drugs and Medicines

Audit analysed the reasons for non-availability of drugs and medicines in the GMIs which are brought out in the succeeding paragraphs.

4.3.1 Non-supply of demanded drugs and consumables

Audit found that against the drugs and consumables of EDL demanded by GMIs, the RMSCL did not procure all the drugs and consumables. Further, there were cases in which there was no supply of demanded and purchased drugs and consumables to the GMIs during the year. This has been shown in **Table 4.2** below:

Table 4.2: Shortfall in supply of drugs and consumables as on 31 March 2022

Year	Total number of drugs and consumables demanded	Number of drugs and consumables which were purchased against the demanded drugs	Number of drugs and consumables demanded but not purchased (2-3)	Number of drugs and consumables purchased but not issued
1	2	3	4	5
2017-18	810	721	89	3
2018-19	827	765	62	6
2019-20	829	760	69	0
2020-21	933	741	192	3
2021-22	936	788	148	1

Source: Information provided by RMSCL and data of e-Aushadhi.

The State Government stated (January 2024) that the process of issuing purchase orders is a continuous process. It was further stated that based on available rate contracts RMSCL issue purchase orders as per the requirement, availability and demand at GMIs received through warehouses.

The reply is not satisfactory as lack of rate contracts for drugs demanded by GMIs indicates failure of RMSCL as the Central Procurement agency. Moreover, specific reasons for lack of supply of drugs which were purchased have not been provided.

4.3.2 Non-availability of drugs and consumables at warehouses

To ensure uninterrupted supply of medicines, the procurement policy of RMSCL states that drug warehouses will maintain a buffer stock of minimum four months and a pipeline stock of two months.

Audit observed that 821 drugs and consumables demanded by Director, Public Health and 936 drugs demanded by Director, Medical Education Department during 2021-22 were not available during period of June and July 2022 at selected four District Drug Warehouses and three Medical College Drug Warehouses as shown in **Table 4.3** below:

Table 4.3: Status of availability of types of essential drugs and consumables

Particulars	DDW Ajmer	DDW-II Jaipur	DDW Jhunjhunu	DDW Sriganganagar	MCDW Ajmer	MCDW Jaipur	MCDW Udaipur
Number of drugs not available (*per cent*)	223 (27)	338 (41)	187 (23)	439 **(53)**	478 (51)	138 **(15)**	315 (34)

Source: Information provided by the seven test-checked DDWs/MCDWs.

The above Table shows that 15 to 53 *per cent* of essential drugs and consumables were not available during June and July 2022 in the seven selected warehouses. The problem was especially severe in DDW Sriganganagar and MCDW Ajmer, where over 50 *per cent* of demanded drugs were unavailable.

The State Government (January 2024) attributed the reasons of non-availability of drugs and medicines to factors such as non-availability of rate contracts, limitations in placing additional order quantity to contracted firm (upto additional 50 *per cent* of contracted quantity as per Rajasthan Transparency Public Procurement Act), changing pattern of drug consumption according to seasons, etc. It was further stated that action is being taken as per norms against approved supplier for non-supply of drugs/surgical and sutures within the stipulated period.

The reply is not tenable as 15 to 53 *per cent* of essential drugs and consumables were not available during June and July 2022 in the seven selected warehouses.

Recommendation 5: *The State Government may take necessary steps to ensure sufficient availability of essential drugs in the hospitals and drug warehouses.*

4.3.3 Medical units issued less than the demanded quantity of medicines

The medicines are supplied directly to the DDWs by the drug manufacturers from where medicines are issued to medical institutions for distribution.

Audit observed that another contributory factor for inadequate availability of drugs was that the quantity of drugs supplied to the medical units by RMSCL or the Warehouses was much less than the annual quantity demanded by the medical units. Audit noticed that the medicines issued during 2017-18 to 2021-22 to medical units were less than the quantity demanded in 79 *per cent* of the indents raised by the medical units, as shown in **Table 4.4** below:

Table 4.4: Medicine issued less than the demanded quantity during 2017-18 to 2021-22

Type of GMI	No. of indents raised to DDW/MCDW	Indents where the issued quantity was less than indented quantity	Percentage of drugs less than the indented quantity
PHCs	1,84,415	1,44,204	78
CHCs	1,24,707	1,01,070	81
SDHs	9,725	8,074	83
Satellite Hospitals	7,381	5,816	79
DHs, MCHs & others	63,313	48,358	76
Total	**3,89,541**	**3,07,522**	**79**

Source: Analysis of e-Aushadhi database provided by RMSCL.

Further analysis revealed that out of 3,89,541 indents, in 1,04,453 indents, quantity allocated was less than 50 *per cent* of the indented quantity and in 40,714 cases it was less than 25 *per cent* of the indented quantity.

The State Government (January 2024) stated that there may be shortage at DDWs due to lack of supply from the approved suppliers and in such cases action as per terms of contract is taken against them. However, the State

Government needs to put in place a robust mechanism to monitor and ensure adequate supplies to GMIs against their indents.

4.3.4 Delay in finalising and renewal of Rate Contracts

Procurement of medical supplies and drugs involve repeated purchases during the year, and therefore RMSCL had adopted a rate contract system. Suppliers for specific drugs to be selected through an open competitive bidding and rate contracts are signed with the Lowest Priced Technically Acceptable Bidder (L1). The duration of rate contract is two years and whenever the existing stock needs replenishment, supply orders are immediately placed on the selected vendor at the contracted price, without having to undergo the tendering process every time. However, any delay in procurement or finalizing of rate contracts results in consequent delays in the replenishment of stock.

Out of a total 969 types of drugs and consumables to be procured by RMSCL, Audit observed that there were no rate contracts for five drugs for a period ranging between 37 days to 172 days ***(Appendix 4.2)***.

Procurement Rules (RTPP Rules, 2013) stipulate that tendering should be completed within 50 days from the opening of the bids.

It was found that in three out of these five drugs, the contract was finalized in 112 days against the stipulated time of 50 days from the opening of technical bids. Details are in ***Appendix 4.3***.

The State Government stated (January 2024) that delays in conclusion and renewal of rate contracts occur due to factors such as negotiation and counter-offers to bidders and lack of bids in certain cases, etc.

4.3.5 Delay in issue of purchase orders

An efficient inventory management system which ensures timely supply and prevents stock-out, requires the maintenance of a buffer stock. The quantity of buffer stock for an item is equivalent to the estimated consumption of the item during the procurement lead time.

RMSCL has adopted the practice of maintaining a buffer stock of four months based on the following:

- Time for placing order - 10 days approx. (after generation of Drug Report Card)
- Time for delivery - 60 days maximum
- Time taken for quality assurance/ testing - 30 days approx.
- Time taken for replacement of quality rejected medicines - one month

Audit noticed that there was no express provision in the procurement policy of RMSCL or Government orders specifying the point at which the purchase orders have to be placed for replenishment of stock. Therefore, the initiation of purchase orders was left to the discretion of RMSCL and orders were placed in an ad-hoc manner.

Position of buffer stock of test-checked drugs at the time of issuance of purchase orders (POs), indicating delays, is shown in **Table 4.5** below:

Table 4.5: Status of buffer stock at the time of issue of purchase orders

Name of Drug and Code	RC Period	Last PO date	Number of POs issued (No. of firms)	Number of POs in which buffer stock was less than prescribed buffer level at the time of issuing POs	Out of col. 5, no. of cases in which buffer stock was less than 50 *per cent* of the prescribed buffer level at the time of issuing POs	Actual Buffer stock level as a percentage of prescribed buffer level at the time of placing POs
1	2	3	4	5	6	7
Povidone Iodine Ointment 5% (221)	11.01.18 to 30.09.19	09.08.19	23 (3)	23	23	27 to 36
ORS Powder IP (274)	11.01.18 to 30.09.19	26.09.19	7 (1)	3	2	29 to 114[82]
Rabies Vaccine Human (Cell Culture) IP (306)	20.12.18 to 30.09.20	17.02.20	8 (1)	7	4	0.32 to 106[83]
Aceclofenac 100 mg and Paracetamol 325 mg Tablets (492)	11.01.18 to 30.09.19	21.08.19	14 (2)	14	14	0.15 to 44
Oseltamivir Capsule 75 mg (639)	05.02.18 to 31.12.19	15.02.19	18 (2)	18	-	57 to 88
Total			**70**	**65**	**43**	

Source: Information provided by RMSCL.

The above Table depicts that:

- Out of 70 cases, in 65 cases the purchase orders were placed when the buffer stock was 0.15 *per cent* to 88 *per cent* of the prescribed buffer level[84];
- Out of these 65 cases, in 43 cases the purchase orders were placed when the buffer stock was less than 50 *per cent* (two months supply as against the required four months). In case of Aceclofenac 100 mg and Paracetamol 325 mg Tablets (492) which are vital, fast-moving drugs, the orders were placed when the buffer level was almost 'Nil'.
- In remaining five cases, buffer stock was more than buffer stock level at the time of placing purchase orders.

The State Government stated (January 2024) that buffer stock may become 'Nil' in a situation where no rate contract is available. It was further stated that in such situation, GMIs may arrange the required drugs through local purchase. The fact remains that in these 65 cases, the Purchase Orders were issued by RMSCL when the buffer stocks were much below the prescribed level.

82 In four POs.
83 In one PO.
84 Prescribed buffer level here refers to four-month buffer stocks across State, i.e. one-third of the total annual demand of the State.

Recommendation 6: *The State Government should specify reorder point at which purchase orders are placed and put in place a mechanism of system generated purchase orders for maintenance of prescribed buffer stocks.*

4.3.6 Delay in supply of Drugs, Medicines and Consumables by the vendors

Rate contracts specify that the vendor should complete the supplies within 45/60 days.

Audit observed that during 2016 to 2022, a total of 1,29,397 (36 *per cent)* out of 3,55,696 supplies were not delivered within 60 days. In 27 *per cent* cases, the delay was more than 30 days. Age analysis of delay in supply of Drugs, Medicines and Consumables is shown in **Table 4.6** below:

Table 4.6: Delay in supply of Drugs, Medicines and Consumables by the vendors

Delay in days	Number of supplies under purchase orders in which delivery was received with delay during 2016-2022
Up to 30 days	94,181 (73 *per cent*)
From 31-100	33,245 (26 *per cent*)
More than 100	1,971 (One *per cent*)
Total	**1,29,397**

Source: e-Aushadhi database provided by RMSCL.

The State Government (January 2024) informed that efforts are being made for continuous supply of drugs, surgical and sutures to Government Medical Institutions. It was also stated that in case of non-supply of drugs, the GMIs may arrange the required drugs through local purchase to ensure availability. It was further stated that action is being taken as per norms against approved supplier for non-supply of drugs/surgical and sutures within the stipulated period.

4.3.7 Supply of drugs and consumables with lesser shelf-life

As per condition no. 13(4) of tender documents of RMSCL, the remaining shelf life of the drugs at the time of delivery should not be less than three fourth of the labeled shelf life. Further, the conditions also mandate that the product with remaining shelf life less than the required shelf life should not be accepted.

Audit analysis of data of *e-Aushadhi* revealed that out of 4,26,674 instances of drugs received at various Drugs warehouses of RMSCL during 2016-22, in 3,301 instances, the remaining shelf life of the drugs at the time of delivery was less than three fourth of the labeled shelf life. Details of these 3,301 instances are provided in **Table 4.7**:

Table 4.7: Remaining shelf life of the drugs and consumables at the time of delivery

S. No.	Shelf life remaining at the time of supply of drugs	No. of cases
1	61 *per cent* to less than 75 *per cent*	2,504
2	31 *per cent* to 60 *per cent*	707
3	Up to 30 *per cent*	90
	Total	**3,301**

Source: Analysis of e-Aushadhi data provided by RMSCL.

The State Government stated (January 2024) that in case of emergency condition for maintaining uninterrupted supply, Board authorizes RMSCL to accept the supply of drugs with less than specified shelf life on case-to-case basis.

The reply is not tenable as the acceptance of drugs with lesser shelf life not only give rise in the cases of expiry of drugs lying in the district drug warehouse or drugs stores of hospitals but also there is the possibility that the drugs may get expired by the time of distribution to the patients.

Receipt of drugs having less than required remaining shelf life is not only in contravention of the conditions of the tender but also reflects a lack of monitoring at the level of Drug Warehouses.

4.4 Quality Assurance

4.4.1 Delay in sending samples for quality check

According to the Quality Control Policy and Procedures of RMSCL, supply of medicines received by the warehouses are to be quality tested before issuing them to the medical units. Samples are to be drawn by the warehouses from each batch of manufacture/supply and sent to RMSCL within two days of receipt of supplies. Until the quality test reports are received the drugs are quarantined by the warehouses. They are issued to the medical units only after the batch passes the quality test.

Audit observed significant delays in sending of samples by the warehouses to RMSCL. Out of the 1,08,444 instances where samples were sent by warehouses to RMSCL, in 95 *per cent* cases the delay was upto one month, while in 5 *per cent* cases the delay was more than a month, as shown in **Table 4.8** below:

Table 4.8: Status of delay in sending samples for quality check

Year-wise cases of delay in sending sample to RMSCL from DDWs/MCDWs							
Year	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**Total**
No. of Cases	13,855	17,267	23,243	20,068	15,921	18,090	1,08,444
Range of delay in sending sample to RMSCL from DDWs/MCDWs							
Delay Range (In Days)	**Up to one Month**		**More than one month to one year**		**More than one year**		**Total**
No. of Cases	1,03,132		4,970		342		1,08,444

Source: e-Aushadhi data provided by RMSCL.

The State Government stated (January 2024) that there was delay in sending the samples in some cases due to shortage of manpower and delay in transportation. It was further stated that the drug warehouses are being instructed again to adhere to the prescribed timeline.

4.4.2 Delay in receipt of quality test reports from the laboratories

As per the Quality Control Policy of RMSCL and conditions stipulated in the empanelment of testing laboratories, the laboratories are required to furnish the test reports within:

(i) 10 days from the receipt of the sample, for non-sterile products like Tablets, Capsules, Pessaries, Ointments, Powder and Liquid Preparations.

(ii) 21 days from the receipt of the sample, in case of I.V. Fluids and Injections.

Audit observed delays in submission of test reports by the empaneled laboratories[85]. In analysis of total 86,965 cases during 2016-22.

- In 17,967 out of 67,603 cases where the samples test reports were to be submitted within 10 days, and
- In the remaining 19,362 cases, in 1,739 cases the reports were to be submitted within 21 days.

Details of delays are shown in **Table 4.9** below:

Table 4.9: Delay in receipt of quality test report from the laboratories

S. No.	Delay Range	Cases of delay where QC reports were required to be received within 10 days	Cases of delay where QC reports were required to be received within 21 days
1	Up-to one month	17,641	1,707
2	One month to six months	321	31
3	Six months and above	5	1
	Total	**17,967**	**1,739**

Source: e-Aushadhi data provided by RMSCL.

Delays in receipt of test reports delayed the issue of medicines by the warehouses to the medical units, resulting in non-availability of medicines at the units.

The State Government stated (January 2024) that delay occurred due to various reasons, such as testing laboratory asking for manufacturer's Standard Testing Protocol (STP), Placebo and working standard for the purpose of testing in certain cases. The fact remains that there were inordinate delays in receipt of laboratory reports contributing to delays in supply of medicines to the GMIs.

Recommendation 7: *The State Government may ensure timely testing of drug samples and receipt of quality test reports on time.*

85 Empanelled laboratories refer to drug testing laboratories approved by RMSCL where sample from the drugs supplied to drug warehouses are sent for quality testing.

4.4.3 Local purchase of drugs and medicines

Under *Mukhyamantri Nishulk Dawa Yojana*, GoR issued instructions (August 2011) that GMIs could utilize 10 *per cent* of the allotted annual budget on medicines for local purchase of medicines in case of non-availability or emergencies.

(i) Excess local purchase of drugs and medicines

Local purchase of drugs and medicines by the Government Medical Institutions is done through open tendering process as prescribed in Rajasthan Transparency in Public Procurement Act, 2012 and the firm with lowest rates being awarded the contract.

Audit found that GMIs made local purchase of drugs and medicines more than the prescribed limit of 10 *per cent*. Information provided by 22 test-checked GMIs[86] revealed that seven GMIs made local purchases more than the prescribed limit of 10 *per cent* of their annual budget during the period 2016-22. Details are provided in ***Appendix 4.4***.

The State Government stated (December 2023) that due to non-supply as per demand and in time from RMSCL and to provide immediate treatment to patients, non-available medicines are purchased on contract basis through approved firms by JLN Hospital, Ajmer and *Rajkiya Mahila Chikitsalya*, Ajmer.

The State Government stated (January 2024) that instruction have been issued to GMIs not to procure drugs and medicines at local level more than the 10 *per cent* of their annual budget.

(ii) Local purchase of drugs and medicines without batch test reports

As per the conditions of the standard bid document used by GMIs for placing local purchase orders, test report from an accredited laboratory should be provided with the supply of medicines, in the absence of which the supply shall be rejected. Further, as per the *Mukhyamantri Nishulk Dawa Yojana* (MNDY) guidelines, the pharmacist should ensure that products of standard quality are purchased and distributed.

In the test-checked GMIs, it was found that during 2016-22, two[87] out of eight DHs and one MCH out of six MCHs had purchased drugs locally without batch test reports[88].

86 22 GMIs: Six MCHs, eight DHs and eight CHCs.

87 Two DHs: DH Phalodi (Jodhpur) and DH Baran, One MCH: Shree Khemraj Katara Government Satellite Hospital, Udaipur.

88 Requisite batch testing reports from approved drug testing laboratory regarding quality of drugs being supplied was to be furnished by supplier at the time of supply of medicines.

Audit examination also revealed that two DHs[89] had failed to enter the details of the locally procured drugs and medicines in *e-Aushadhi*.

The State Government stated (January 2024) that directions have been issued to all CMHOs and PMOs for entering details of local purchase of drugs in *e-Aushadhi* system. Reply regarding drugs were purchased locally without batch test report were awaited (March 2024).

Recommendation 8: *The State Government may ensure issue of drugs to GMIs only after receipt of quality test reports.*

4.5 Equipment

4.5.1 Availability of equipment as per IPHS Norms

Indian Public Health Standards (IPHS) stipulates the number of essential equipment under different categories based on the type/level of the hospitals (number of beds). Audit examination revealed that the required equipment in various categories were not available in the test-checked units.

(i) Availability of equipment in DHs

According to IPHS, 312 types of equipment required in DH having 100 to 200 beds, 332 types of equipment required in DH having 201 to 300 beds and 339 types of equipment required in DH having 301 and above belonging to 16 selected essential categories are required at DH level.

Audit observed (April-July 2022) that none of the sampled eight DHs were fully equipped in the selected 16 categories of essential equipment such as Ear Nose Throat Equipment, Eye Equipment, Dental Equipment, Laboratory Equipment, Endoscopy Equipment and Operation Theatre Equipment as per IPHS norms. It was observed that in the eight sampled DHs, against the requirement of 2,610 equipment[90] prescribed by IPHS for various services, only 1,400 equipment[91] were available. Thus, there was a shortfall of 1,210 (46 *per cent)* equipment in the sampled DHs as shown in ***Appendix 4.5***.

(ii) Availability of equipment in SDHs/SHs

According to IPHS, 189 types[92] and 192 types[93] of equipment belonging to 14 essential categories are required at SDHs.

Audit observed (April-July 2022) in the four[94] sampled SDHs/SHs, against the 765 equipment[95] required for various services under 14 essential categories,

89 DH Phalodi (Jodhpur) and DH Kotputli (Jaipur).
90 Total requirement of equipment in DHs as per IPHS = 312+312+312+332+332+332+339+339=2,610.
91 Total equipment available in the DHs = 158+197+199+178+179+136+192+161=1,400.
92 For bed capacity of 31 to 50.
93 For bed capacity of 51 to 100.
94 SDH Salawas, SH Sanganer and Vallabhnagar, and SDH/CHC Bijainagar.
95 Total equipment required in four SDHs/SHs as per IPHS = 189 +192+192+192 = 765.

only 374 (48.89 *per cent*) equipment[96] were available reflecting a shortfall of 391 (51.11 *per cent*) essential equipment. Details are shown in ***Appendix 4.6***.

(iii) Availability of equipment in CHCs

As per the IPHS for CHC, 269 types of equipment under 15 different categories are deemed essential for CHCs.

Audit observed (April-July 2022) that in the eight test-checked CHCs, a total of 1,000 equipment[97] (46.47 *per cent*) were available against the requirement of 2,152 equipment[98] as per IPHS. Thus, there was a shortfall of 1,152 (53.53 *per cent)* equipment in the sampled CHCs as shown in ***Appendix 4.7***.

(iv) Availability of Equipment in PHCs

IPHS prescribes 94 equipment under five essential categories for PHCs.

Audit observed (April-July 2022) that in 16 test-checked PHCs, a total of 1,057 equipment[99] (five categories) were available against the total requirement of 1,504 equipment[100] prescribed by IPHS, reflecting an overall shortfall of 29.72 *per cent* essential equipment in the test-checked PHCs. Details are shown in ***Appendix 4.8***.

The State Government (September 2023) stated that equipment has been supplied on the basis of demand received from National Health Mission/Directorate.

The reply of Government is not tenable as all the equipment are of essential categories and should be made available to the GMIs irrespective of their demands.

Lack of essential equipment may result in inadequate diagnosis and investigation of patients thereby affecting satisfactory delivery of healthcare services.

4.5.2 Repair and Maintenance

Non-execution of scheduled preventive maintenance and calibration of equipment in health institutions

As per the terms of the agreement between RMSCL and the maintenance firm[101], preventive maintenance of all equipment was to be done half yearly,

96 Total equipment available in the four SDHs/SHs = 94+79+92+109 = 374.
97 Total number of equipment available in the eight CHCs = 116+118 +192+105+110+119+188+52 =1,000.
98 Total 15 types of equipment requirement for CHC as per IPHS = 269 x 8 CHC = 2,152.
99 Total equipment available in the 16 PHCs = 30+82+73+72+67+68+64+56+75+ 72+64+57+76+78+73+50 = 1,057.
100 Total equipment requirement for PHC as per IPHS = 94 x 16 PHC = 1,504.
101 Kirloskar Technologies Private Limited (KTPL), New Delhi is the maintenance firm and agreement was executed on 4 May 2018 for a period of two years.

and calibration was to be done at different intervals (half yearly, annually and biennially) depending upon the equipment.

Audit observed that 92 *per cent* of the required preventive maintenance and calibration were not conducted by the firm during the period June 2018 to February 2022, as shown in **Table 4.10** below:

Table 4.10: Status of execution of scheduled preventive maintenance and calibration

Action to be performed	Number of instances in which preventive maintenance/ calibration of an equipment was to be done	Number of instances in which preventive maintenance/ Calibration was actually done	Shortage in performing preventive maintenance /Calibration	Percentage of shortage in preventive maintenance / Calibration
Preventive Maintenance	4,18,231	30,069	3,88,162	93
Calibration	2,45,854	22,463	2,23,391	91
Total	**6,64,085**	**52,532**	**6,11,553**	**92**

Source: Analysis of e-Upkaran data provided by RMSCL.

The State Government stated (May 2023) that penalty has been recovered from the contractor. It was further stated (January 2024) that the new contract has been executed from April 2022.

Recommendation 9: *The State Government may ensure availability of essential equipment in the GMIs as per IPHS as well as their periodic maintenance and calibration.*

4.5.3 Non-functional/Idle equipment

i. Non-installation of equipment in Blood Component Separation Unit

Equipment related to Blood Component Separation Unit in two district hospitals[102], purchased for ₹105.05 lakh were lying idle for periods ranging between four to five years. It was also found that the details of the equipment were not entered in *e-Upkaran* on receipt in the District Hospitals, as instructed (June 2018) by DMH&FW.

102 DH Jhunjhunu: 23 equipments of ₹ 51.26 lakh, DH Sriganganagar: 27 equipments of ₹ 53.79 lakh.





Blood Cell Separation Machine of the Blood Component Separation Unit at DH Sriganganagar lying unutilised (3 January 2022) and at DH Jhunjhunu (17 December 2021) noticed during Joint Physical Verification with departmental authorities.

ii. Delay in verification of inventory of equipment

As per the user guide of *e-Upkaran*, the first level of data entry on receipt of equipment will be done by the Store In-Charge of the medical units concerned. Subsequently, the inventory is to be verified by the Medical Officer In-Charge (MOIC) and of the units entered in the system within seven days.

Audit observed delays of one to 2,114 days in the verification of the equipment by the Medical Officer In-Charge in 25,073 cases out of 30,108 cases, as shown in **Table 4.11** below:

Table 4.11: Age analysis of delay in verification of equipment

Table 1: Year-wise cases of delay in verification							
Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total
No. of Cases	2,583	2,854	1,636	969	2,487	14,544	25,073

Table 2: Delay Range (in days)							
Delay Range (In Days)	1 to 30	31 to 100	101 to 200	201 to 500	501 to 1000	1001 to 2114	Total
No. of Cases	6,969 (27.79%)	6,917 (27.59%)	3,144 (12.54%)	4,533 (18.08%)	2,712 (10.82%)	798 (3.18%)	25,073 (100%)

Source: e-Upkaran data provided by RMSCL.

In 31,668 out of 61,776 cases (51 *per cent*), the date of verification was not entered in the system as ascertained by Audit from the data. Further, in 35 out

of 30,108 cases, date of verification by MOIC was prior to the date of receipt of equipment in the GMI.

iii. Lack of trained manpower, non-completion of civil work and excess equipment

Medical equipments are an important aspect of healthcare as they help diagnose, monitor and treat a wide ranges of medical conditions. Equipment's like Dental X- ray machine, Dental X-ray chair are essential for diagnostic and treatment of Dental diseases. Further Fetal Doppler is important for monitoring fetus health. Equipment like foot-operated suction machine, ECG machine and Anaesthesia machine are vital for conducting surgeries.

Audit observed that 20 equipments (worth ₹ 0.98 crore) pertaining to nine GMIs[103] remained non-functional/idle. Test-checked GMIs attributed this to reasons such as shortage of trained manpower, want of spare parts and supply of equipment without demand. The relevant details are provided in ***Appendix 4.9***.

The State Government stated (December 2023) that the process to make equipment (HPLC MAKE-Bio-Rad Model-Variant-II. HPCL) functional is in progress at JLN Medical College, Ajmer.

103 CHC Masuda (Ajmer); PHC Kharwa (Ajmer); PHC Karansar (Jaipur); Drug Testing Laboratory, Jaipur; JLN Medical College, Ajmer; PHC Jawad, Udaipur; PHC Palodara, Udaipur; PHC Hingonia, Jaipur, and CHC Sarada, Udaipur.