

Chapter-IV

Availability of Drugs, Medicines, Equipment and Other Consumables

This Chapter discusses the availability of drugs/medicines, equipment and other consumables. The chapter mainly focuses on procurements and management of drugs and equipment by Uttar Pradesh Medical Supplies Corporation Limited (UPMSCL), which was established in October 2017 for centralised procurements and supplies of drugs, consumables and equipment in the State.

Audit objective: *Whether the availability of drugs, consumables and equipment were ensured in public health?*

Brief snapshot of the Chapter

- The Government of Uttar Pradesh provides free of cost health services and drugs facilities to patients through Government hospitals.
- Uttar Pradesh Medical Supplies Corporation Limited (UPMSCL) could not make supplies of demanded quantities of drugs to DGMH, NHM and DGME during 2018-22. As a result, many of the essential drugs were either not available or available only intermittently in HCFs.
- In 75 HCFs test-checked in audit, stock-out of some drugs were up to 1,433 days in DWHs, 1,393 days in DHMs, 1,428 days in CDHs and 1,459 days in CHCs. The status of drugs availability in PHCs was particularly worse where up to 16 drugs (80 *per cent*) out of 20 drugs test-checked in audit were never available during 2018-22.
- Against the UPMSCL Drug Procurement Policy, drugs amounting to ₹ 46.90 crore having shelf life of less than 80 *per cent* and imported drugs/vaccines amounting to ₹ 2.18 crore with less than 60 *per cent* shelf life were accepted from suppliers. Further, UPMSCL did not deduct ₹ 13.69 crore on account of testing and handling charges from the payments made to suppliers during 2018-22.
- Drugs valuing ₹ 27.06 crore got expired in the central and district warehouses of UPMSCL during March 2020 to March 2022 mainly due to low shelf life of drugs, refusal of drugs by consignee warehouses due to lack of space, no demand, *etc.*
- Quality assurance of drugs procured was inadequate. Drugs were distributed to warehouses/hospitals even before receipt of quality test report, some drugs subsequently found as 'not of standard quality' (NSQ) were distributed to the end users during the intervening period of sample collection and declaring them NSQ.
- During 2018-21, in GMC Ambedkar Nagar, 24 to 27 consumables and in GMC, Meerut, 41 to 42 consumables were not available for more than four months. The unavailability of more than four months was ranging between 145 to 365 days in GMC, Ambedkar Nagar whereas in GMC, Meerut it ranged between 121 to 365 days.
- Drugs and Vaccines Distribution Management System (DVDMS) software modules were not implemented fully.
- UPMSCL failed to prepare Essential Equipment List which was to be provided to user departments for confirmation of their requirements and finalisation of rate contracts.
- Medical equipment was in shortfall in IPD, OT, ICU, labour room, laboratory and radiology departments in all test-checked HCFs.

- None of the DHs had all the required number of IPD equipment. The availability of OT equipment in test-checked DHs was ranging between 41 *per cent* and 94 *per cent*. The maximum availability of OT equipment in CHCs was 96 *per cent* with minimum availability of 24 *per cent*.
- There were shortages of laboratory and radiology equipment in test-checked DHs. Similarly, CHCs were lacking in laboratory and radiology equipment, though CHC, Chinhat, Lucknow had all radiological equipment.
- Test-checked GMCs, which are referral tertiary hospitals, had shortage of IPD equipment. However, audit also noticed idle equipment in these GMCs due to unavailability of human resources.

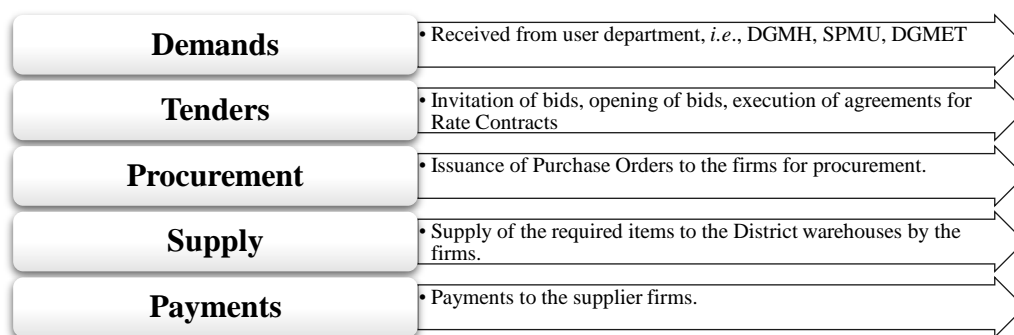
4.1 Introduction

The Government of Uttar Pradesh provides free of cost health services and drugs to patients through the Government hospitals. As per the drug procurement policy (June 2012) of the State Government (Directorate of Medical Health Services), 20 *per cent* fund for procurement of drugs were to be utilised at the Headquarters level for distribution of these drugs amongst hospitals according to the requirements and the remaining drugs were to be procured by respective hospitals on the basis of centralised rate contracts (RCs). The State Government, further, established the Uttar Pradesh Medical Supplies Corporation Limited (UPMSCL) in October 2017 for centralised procurements and supplies of drugs, consumables and equipment. The main objective of UPMSCL was to select vendors and execute agreements with them to procure essential drugs, consumables and equipment through e-tendering, based on online demands raised by the districts. Quality assurance of the procured drugs and supplies thereof to the district warehouses was also the responsibility of the UPMSCL. Audit focussed on procurement of drugs after the formation of UPMSCL, i.e., for the period 2018-19 to 2021-22.

4.2 Drug Procurement Policy and Framework

UPMSCL framed the drug procurement policy¹ based on the Uttar Pradesh Procurement Manual (Procurement of Goods), 2016. The policy lays down the directives to be adopted by UPMSCL for procurement of quality drugs and medical consumables for all HCFs of the State by adopting fair and transparent system by providing equal opportunities to all prospective agencies. The procurement is to be based on the indent of various directorates, autonomous institutes under Department of Health and Family Welfare, Department of Medical Education, *etc.* The schematic diagram of the functioning of UPMSCL is given in **Diagram 4.1**.

¹ Procurement policy of UPMSCL was approved in its 2nd board meeting on 18 May 2018.

Diagram 4.1: Schematic diagram of the functioning of UPMSCL

Further, the Government of Uttar Pradesh framed (November 1994) a policy² for the purchase of drugs, surgical instrument and consumables for Government Medical Colleges. The policy envisages purchase of above goods in two stages: first at DG level and second at Medical college level. For the purchase of drugs, committees were to be constituted at DG level³ and college level⁴ and a standard list of drugs was to be prepared by the committee for RCs. The policy was further amended in January 2020 by the department of Medical Education. According to the policy, 80 *per cent* of funds for procurement of drugs were to be provided to UPMSCL whereas 20 *per cent* funds were left for the medical colleges for local purchases.

4.3 Mechanism of raising demands

As per the Government decision (October 2017), UPMSCL was to obtain centralised demand from all districts of the State through electronic means for the procurement of drugs, consumables and equipment. However, UPMSCL failed to obtain centralised demands through online mode which resulted in the Government decision not being followed. Further, it was observed that, UPMSCL switched over (June 2022) to consumption-based model⁵ to avoid overstocking and expiry of drugs in warehouses for the procurement of drugs.

UPMSCL, while confirming the facts and figures, stated (October 2022) that on the basis of indents given by DGMH in 2018-19, RCs were finalised for two years. However, Letter of Intents⁶ (LoIs) got exhausted rapidly. Hence, UPMSCL made an effort in 2019-20 to take the indents directly from health facilities through DVDMS portal. While consolidating, the demands were found to be very high and irrational. It was informed to DGMH which rationalised the demand. Therefore, UPMSCL was taking rationalised demand from DGHM.

The fact remained that UPMSCL did not purchase drugs on the basis of demands placed by user health facilities which was in violation of State Government decision (October 2017) and it led to unavailability of drugs in hospitals as well as supply of drugs which were not in demand to warehouse.

The Government's reply was awaited (August 2024) despite reminders.

² No. 3572 Sek-1/Paanch-Ji-17/91 dated 11 November 1994.

³ DG, MET, two principals from GMCs, two CMSs from GMCs, a gazetted officer nominated by the Government and a Medical Officer in Charge store from GMCs

⁴ Principal: President, Chief medical superintendent: Secretary, Members: Medicine, Gynaecology, Surgery, Medical officer store and a gazetted officer nominated by the Government.

⁵ Purchase orders is issued based on the actual quantity consumed from warehouses.

⁶ Contracted quantity for supply of drugs

4.3.1 Demand and Supply of drugs

The status of demands placed by DGMH, NHM and DGMET and orders as well as supplies thereagainst by UPMSCL during 2018-22 was as detailed in **Table 4.1**.

Table 4.1: Demands vis-a-vis supplies by UPMSCL

Year	Drugs demanded		Drugs ordered by UPMSCL		Drugs supplied by vendors	
	Number	Quantity	Number	Quantity	Number	Quantity
DGMH (EDL⁸)						
2018-19	262	81704	136	10357	129	8423
2019-20	278	17680	189	33028	178	24253
2020-21	278	41480	148	10455	118	7393
2021-22	272	51850	251	48927	235	39322
Average	273	48179	181	25692	165	19848
NHM						
2018-19	139	76311	57	15945	50	7504
2019-20	171	79436	124	21400	105	17605
2020-21	124	47522	61	7293	53	6200
2021-22	35	83336	48	26723	39	23291
Average	117	71651	73	17840	62	13650
DGMET⁹						
2020-21	839	3030	23	63	14	31
2021-22	0	0	5	1	1	0
Average	839	3030	14	32	8	31

(Source: UPMSCL)

As seen from **Table 4.1**, the UPMSCL could not procure quantities of drugs demanded by DGMH, NHM and DGMET during 2018-22. Against the DGMH's demands of average 273 drugs, orders of average 181 drugs (66 per cent) were placed by the UPMSCL against which average 165 drugs (60 per cent) could be supplied by the UPMSCL. Moreover, during 2018-22, out of demanded 117 (average) drugs for NHM, only 73 (62 per cent) were ordered and supply was made for only 62 (53 per cent) of drugs by the vendors. Further, out of 839 drugs demanded by MET, only 15 (2 per cent) drugs was made available to the department by the UPMSCL. Audit observed that delays in rate contracts as well as short supplies by vendors were main reasons for low supply of drugs. In view of negligible supply of drugs by UPMSCL against the demands raised by MET, it was decided (March 2021) to allocate the funds to the medical colleges for procurement of drugs.

Further, State level data of the indents given by the health care facilities and supply of drugs thereagainst by the drugs warehouses of the UPMSCL could not be provided by the UPMSCL, due to which the position of supply up to the level of health care facilities for the State could not be examined in Audit. However, Audit examined the indents and supplies at test checked DHs as discussed in the succeeding paragraph.

Thus, UPMSCL largely failed to fulfil the demand of DGMH, NHM and DGMET which defeated the objective of establishing a specialised company for

⁷ Including tablets, capsules, injections, syrups, etc.

⁸ Information of demand of Non-EDL drugs was not provided by the UPMSCL.

⁹ Demand of drugs (2018-20) and consumables (2018-22) was not provided by DGMET.

procurements and supply of drugs to health care facilities. Further, as mentioned in **Paragraph 6.2.1**, the UPMSCL could not utilise the funds provided to it for procurement of drugs and equipment.

The Government's reply was awaited (August 2024) despite reminders.

4.3.1.1 Demand and supply of drugs in test-checked District Hospitals managed by UPMSCL

Scrutiny of records of 16 test-checked DHs revealed that the hospitals were indenting drugs from Drug Warehouses of UPMSCL from 2019-20. Audit analysed the demand raised during the period 2019-20 to 2021-22 and found that against the indented quantities, 12 to 97 *per cent* (2019-20), 15 to 66 *per cent* (2020-21) and 12 to 66 *per cent* (2021-22) drugs were supplied by the drug warehouses of UPMSCL to the test-checked DHs. The details are given in *Appendix 4.1(A)*.

Scrutiny of demand and receipt of drugs by DHs further revealed (*Appendix 4.1(B)*) that some drugs were not supplied at all against the indent of 16 test-checked DHs during 2019-22.

The Government's reply was awaited (August 2024) despite reminders.

4.4 Essential drug list (EDL)

The concept of essential medicines, first introduced by WHO in 1977, has now been adopted by many countries, non-governmental organisations and agencies. The list is considered to include the most cost-effective medicines for a particular indication. It is developed in concordance with the standard treatment guidelines keeping in mind the healthcare needs of the majority of the population. Careful selection of a limited range of essential medicines results in a higher quality of care, better management of medicines and more cost-effective use of health resources.

In Uttar Pradesh, MHFW Department has a list of essential drugs containing 295 drugs. Further, MET Department has made a list of 839 drugs for the tertiary level hospitals at GMCs in the State.

4.4.1 Revision of EDL

Prior to establishing UPMSCL in October 2017, drugs for primary and secondary level hospitals were being procured by Chief Medical Officers (CMOs)/ Chief Medical Superintendents (CMSs) of the concerned districts based on RCs decided by the Director, Central Medicine Supply Depot (CMSD).

Uttar Pradesh had a list of essential drugs comprising 1,084 drugs for primary and secondary level hospitals. Audit observed that after revising the list of essential drugs¹⁰, DGMH sent (April 2020) a list containing 559 drugs to the Government for approval. However, against the list of 559 drugs, the Government accorded (October 2020) approval of only 295 drugs under EDL.

¹⁰ On the basis of local purchase of a particular drug by many districts, the Drug Review Committee (DRC) considers this drug for inclusion in the EDL. This process is to take place every year.

Audit observed that DGMH assured (October 2020) the Government that it would prepare a list of special drugs separately by including specialised drugs. It was further noticed that SPMU had requested (November 2020) DGMH for inclusion of Mifepristone, a drug for safe abortion, under the special drug list. However, the list had not been prepared as of August 2021. Incidentally, UPMSCL resorted to procurement of large quantity of drugs under non-EDL category as discussed in **Paragraph 4.5.6**.

State Government (MHFW) disagreed with the audit observation and replied (February 2023) that special drugs are purchased at zonal and district level in a limited quantity which is uncertain. That is why 20 *per cent* funds are allocated to DHs for local purchases and remaining drugs are purchased by NHM and UPMSCL.

The reply was not acceptable, as the reply addresses purchase of special drugs whereas audit observation is on not preparing special drug list though assured (October 2020) by DGMH.

4.4.2 Procurement of EDL drugs

Based on the scrutiny of the records and data/ information provided by the UPMSCL, the status of EDL drugs procured during 2018-22 is given in **Table 4.2**.

Table 4.2: Procurement of essential drugs

Year	No. of Drugs in EDL	No. of drugs demanded by the DGMH from EDL	No. of Drugs procured against EDL by UPMSCL	Percentage of drugs procured against demand of DGMH	Percentage of drugs procured against EDL
2018-19	1084	262	145	55	13
2019-20	1084	278	206	74	19
2020-21	295	278	169	61	57
2021-22	295	272	258	95	87

(Source: UPMSCL and DGMH)

As evident from **Table 4.2**, percentage of procured drugs against demands raised by the DGMH ranged between 55 *per cent* and 95 *per cent* and against EDL, it ranged between 13 *per cent* and 87 *per cent* indicating that a vital portion of drugs was not procured by the UPMSCL. Even after reducing the number of drugs under EDL from 1084 to 295 in October 2020, procurement during 2020-22 was 57 *per cent* and 87 *per cent* by UPMSCL, respectively. As a result, hospitals did not have the required drugs as noticed during audit of test-checked districts.

UPMSCL accepted (July 2022) the facts and stated that due to non-participation of bidders and non-responsive bids, some of the RCs for EDL could not be finalised. Reply of MHFW was awaited (August 2024) despite reminders.

The status of EDL prescribed by MET and the number of drugs selected for procurements by test-checked GMCs is given in **Table 4.3**.

Table 4.3: Procurement of essential drugs in test-checked GMCs

Particulars	GMC, Ambedkar Nagar				GMC, Meerut			
	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22
Number of drugs in EDL	839	839	839	839	839	839	839	839
Number of drugs procured (per cent)	404 (48)	404 (48)	404 (48)	404 (48)	310 (37)	368 (44)	471 (56)	210 (25)

(Source: Test-checked GMCs)

It may be seen from **Table 4.3** that in GMC, Ambedkar Nagar, only 48 per cent EDL drugs were taken up for procurement during 2018-22 whereas in GMC, Meerut it ranged between 25 per cent and 56 per cent defeating the basic objective of providing higher quality care to the patients. Audit further observed that GMC, Ambedkar Nagar sent the demands of funds for procurement of drugs whereas GMC, Meerut did not assess the requirement of drugs as per EDL and no demand was sent to the DGMET for allotment of funds during 2018-21. The Government provided funds without having any assessment from the GMCs.

The State Government (MET) stated (November 2022) that GMC, Ambedkar Nagar, is a new hospital of the rural area and due to shortage of doctors and super specialty department, all the EDL were not utilised. It further stated that not procuring of drugs by UPMSCL, non-receipt of economical rates from the bidders and not arranging for local purchases of the drugs were the main reasons for unavailability of drugs in GMC, Meerut.

Fact remains that the essential medicines which should have been available at all times in a tertiary level hospital, were not available in the GMCs for months.

Further, for assessing the availability of drugs under EDL, audit short listed the number of drugs after taking advice from the experts from GMCs and past experiences (CAG's Audit Report No. 02 of the year 2019 on Performance Audit on Hospital Management in Uttar Pradesh). As such, 66 drugs were selected for the GMCs, 19 to 42 drugs for DHs, 20 drugs each for CHCs & PHCs and 10 drugs for SCs. The results are discussed in succeeding paragraph.

4.4.3 Availability of selected drugs in test-checked hospitals

Status of the availability of drugs sampled (*Appendix 1.4*) for test-check in GMCs was as detailed in **Table 4.4**.

Table 4.4: Stock-out of selected drugs in test-checked GMCs

Parameters	GMC, Ambedkar Nagar			GMC, Meerut		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Essential drugs sampled in Audit	66	66	66	66	66	66
Number of selected essential drugs not available in the RC of drugs (Per cent)	27 (41)	27 (41)	27 (41)	42 (64)	45 (68)	42 (64)
Number of drugs not available for one to two months	2	3	2	3	3	5

Parameters	GMC, Ambedkar Nagar			GMC, Meerut		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Number of drugs not available for two to four months	2	6	2	5	5	5
Number of drugs not available for more than four months ¹¹ (<i>per cent</i>)	46 (70)	38 (58)	41 (62)	51 (77)	54 (82)	47 (71)

(Source: Stock register of test-checked GMCs)

Table 4.4 shows that against 66 sampled essential drugs, 41 *per cent* drugs were not available in RCs of GMC, Ambedkar Nagar during 2018-21 whereas in GMC, Meerut it ranged between 64 and 68 *per cent*. Further, drugs ranging between 58 *per cent* and 82 *per cent* were not available for more than four months in both the GMCs during 2018-21. Audit observed that funds made available by MET were utilised by GMCs and demands for additional funds for procurement of drugs were not sought from the Government.

Further, audit examined the availability of sampled drugs (*Appendix 1.4*) in the test-checked DHMs, DWHs and CDHs during 2018-19 to 2021-22 and found that many drugs either were not available or available intermittently as shown in **Table 4.5**.

Table 4.5: Stock-out of selected drugs in test-checked DHs

Type of hospital	No. of test-checked hospitals	Number of drugs identified for test-check in audit	Number of drugs available all times	Number of drugs never available at all	Number of drugs available partially	Percentage of availability	Stock out range of partially available drugs (days)
DWHs	7	19	1-9	0-2	9-18	89-100	10-1433
DHMs	7	34	1-20	2-5	12-28	85-94	5-1393
CDHs	2	42	6-12	2-3	27-34	93-95	8-1428

(Source: Stock register of test-checked DHs)

It may be seen from **Table 4.5** that the stock-out of drugs was up to 1,433 days in DWHs, 1,393 days in DHMs and 1,428 days in CDHs during 2018-22. Further, one to two drugs in four out of seven DWHs, two to five drugs in all DHMs and two to three drugs in both CDHs were never available during 2018-22. Only in DWHs at Jalaun, Kanpur Nagar and Saharanpur all the selected drugs were available in different spells. The details are given in *Appendix 4.2(A)*.

The status of the availability of sampled essential drugs (*Appendix 1.4*) in the test checked CHCs and PHCs is given in **Table 4.6**.

¹¹ E/D Ciprofloxacin; E/D Ampicillin 500 mg; Injection Gentamicin (40 ml); Tablet Alprazolam (0.25 mg) in Ambedkar Nagar and Framycetin (skin cream), Injection Ciprofloxacin (100 ml); Injection Dexamethasone (2 ml); Injection Ranitidine & lotion Calamine in Meerut.

Table 4.6: Stock-out of selected drugs in test-checked CHCs and PHCs

District	Nos. of test-checked hospitals	Number of drugs identified for test-check in audit	Number of drugs available all times	Number of drugs never available at all	Number of drugs available partially	Percentage of availability	Stock out range of partially available drugs (days)
CHCs							
Ghazipur	2	20	0	2-3	17-18	85-90	128-1459
Hamirpur	2	20	1-3	1-2	15-18	90-95	80-1173
Kanpur Nagar	2	20	1-1	0-2	17-19	90-100	32-1395
Lucknow	3	20	0-1	1-4	15-20	80-100	5-1423
Kushinagar	2	20	0-7	3-3	10-17	85	21-1407
Kannauj	2	20	0-2	1-1	17-19	95	2-1457
Jalaun	2	20	1-3	1-1	16-18	95	59-1419
Saharanpur	2	20	0-2	1-2	17-18	90-95	14-1455
Unnao	2	20	1-3	1-2	16-17	90-95	28-1443
PHCs							
Ghazipur	4	20	0	7-16	4-13	20-65	34-1375
Hamirpur	4	20	0	6-10	10-14	50-70	26-1391
Kanpur Nagar	4	20	0-1	11-13	6-9	35-45	13-1260
Lucknow	6	20	0-1	7-10	10-13	50-65	16-1431
Kushinagar	4	20	0	6-10	10-14	50-70	10-1337
Kannauj	4	20	0	7-12	8-13	40-65	53-1402
Jalaun	4	20	1-2	4-9	10-15	55-80	27-1447
Saharanpur	4	20	0-1	6-11	8-14	45-70	13-1450
Unnao	4	20	0-1	9-14	6-10	30-55	82-1449

(Source: Stock register of test-checked CHCs and PHCs)

Table 4.6 shows that in 19 test-checked CHCs, upto four drugs were never available during 2018-22. The situation worsened in the test-checked 38 PHCs where upto 16 drugs (80 *per cent*) were never available during the same period. Further, position of stock-out of drugs was ranging between two and 1,459 days and 10 and 1,450 days in test-checked CHCs and PHCs respectively. The details are given in *Appendix 4.2(B)*.

Further, in test checked SCs, stock register of drugs were not maintained due to which availability of drugs in these SCs could not be assessed in audit.

During survey of 60 OPD and IPD patients (30 in each GMC) in both GMCs, 60 *per cent* OPD patients and 45 *per cent* IPD patients confirmed that they did not get all prescribed medicines by the doctors.

The Government (MHFW) replied (February 2023) that by the end of 2019-20, Covid-19 disaster had spread worldwide and only emergency services were in operation. Number of general patients had decreased, due to which there was minimum use of drugs and supply of Covid-19 drugs was being done on priority. This should have been taken into consideration while preparing the report. However, reply of MET was awaited (August 2024) despite reminders.

The reply of MHFW was not acceptable as audit had analysed the availability of drugs during 2018-22 period and found that drugs were not available in the hospitals. Further, as pointed out above, some drugs were not available during entire period of 2018-22, *i.e.*, even before and after Covid-19.

Unavailability of essential drugs at all the levels of medical care results in increase in out-of-pocket expenditure for the patients and creates financial and medical distress.

4.5 Contract management for procurement of drugs

Drugs procurement policy has laid down procedure for the procurement by entering into contracts with supplier firms. Test-check of records and analysis of data/ information provided by the UPMSCL revealed various irregularities in the contract management as discussed in the succeeding paragraphs:

4.5.1 Tender notifications to pharmaceutical manufacturing associations

In compliance with the terms and conditions of the drugs procurement policy, the tender notifications are also to be sent to pharmaceuticals manufacturing associations for wide publicity.

Scrutiny of records of UPMSCL revealed that in 323 test-checked agreements, out of 432 agreements executed by UPMSCL with the suppliers during 2018-22, tender notifications were not sent to the pharmaceutical manufacturing associations for wide publicity in contravention to the policy.

The Government's reply was awaited (August 2024) despite reminders.

4.5.2 Invitation of tender on short term notices

In compliance with the terms and conditions of the drugs procurement policy, while inviting the tenders, minimum 21 days should have been given for the submission of bid by the interested bidders. However, in the events of urgency or re-tendering, short term tender notice giving 10-15 days' time was to be floated.

Scrutiny of records and analysis of data made available by the UPMSCL, however, revealed that during the period 2018-22, in 60 cases¹² (first time tender), bids were invited from the bidders by giving lesser days than the prescribed 21 days, ranging between five days and 19 days. It was further observed that in 27 cases (45 per cent), out of 60 cases, less than 10 days were given for submission of bids. This was not only against the drugs procurement policy but also raises question on the contract management of UPMSCL as in 25 cases¹³, LOI were issued after 24 to 345 days and agreements were executed up to four to 293 days beyond the prescribed 31 days¹⁴. Thus, there was no justification of inviting tenders on short term notices as actual execution of the contracts took substantial time.

The Government's reply was awaited (August 2024) despite reminders.

4.5.3 Alternative procurement

Drug procurement policy envisages that in cases where prospective bids are not obtained through open tender, UPMSCL can do procurement from the most

¹² In 66 other cases, short term tender notices were floated for Covid-19 related procurements.

¹³ In another 12 cases, date of execution of agreement was not mentioned.

¹⁴ 21 days for the submission of bid and 10 days for execution of agreement.

cost-effective source among PSUs¹⁵ and other Medical Service Corporations¹⁶, etc. However, at any instance, procurements for requirements of not more than two months was to be made.

Test-check of records, however, revealed that owing to non-submission of perspective bids by the firms, in 17 Purchase Orders (POs) (Value of Received quantity: ₹ 9.65 crore), the UPMSCL resorted to procuring drugs directly from the public sector undertakings and vendors approved by the other state medical services corporations. Audit observed that though the procurements for not more than two months were only to be made, no assessment was made by the UPMSCL for requirement of drugs for two months.

The Government's reply was awaited (August 2024) despite reminders.

4.5.4 Short submission of performance security

Performance security acts as a safeguard against unsatisfactory performance or violation of contract agreement by the supplier on the contract. Drug procurement policy envisages that performance security shall be solicited from all successful bidders at the rate of five *per cent* of the value of the contract as per the bid document.

Audit observed that out of 323 agreements executed under 27 test checked tenders, in 11 agreements, the bidders had submitted only ₹ 2.34 crore against the required performance security of ₹ 4.97 crore resulting in short realisation by ₹ 2.63 crore (52.92 *per cent*). This not only led to extending undue benefits to the bidders but may also lead to compromising the safeguard to the corporation in case of failure of bidders to supply medicines.

The Government's reply was awaited (August 2024) despite reminders.

4.5.5 Rate contracts of EDL drugs

As per the State Government order (October 2017), UPMSCL was responsible to execute Rate Contract (RC) of all essential drugs. The status of contracts executed (RCs) by UPMSCL against the EDL drugs and drugs demanded by DGMH during 2018-22 is given in **Table 4.7**.

Table 4.7: Rate contracts of essential drugs

Year	Number of drugs in EDL	No. of drugs demanded by DGMH	Number of EDL drugs for which RCs executed	Number of drugs procured	Percentage of RCs executed against		Percentage of EDL drugs procured against RCs
					EDL	Demands (DGMH)	
(1)	(2)	(3)	(3)	(4)	(5)		(6)
2018-19	1084	262	173	145	16	66	84
2019-20	1084	278	217	206	20	78	95
2020-21	295	278	237	169	80	85	71
2021-22	295	272	262	258	89	96	98

(Source: DGMH and UPMSCL)

¹⁵ Public sector undertaking firms: KAPL, IDPL, RDPL BPCL & HAL.

¹⁶ Other State Medical services corporations: RMSCL, TNMSC, GMSCL and other similar corporations.

As evident from **Table 4.7**, the EDL for which RCs were executed ranged between 16 per cent and 89 per cent whereas it was ranging between 66 per cent and 96 per cent against the drugs demanded by DGMH. The procurement of EDL drugs against these RCs was ranging between 71 per cent and 98 per cent. Thus, the RCs executed by UPMSCL were less than the number of drugs in EDL as well as number of drugs demanded by DGMH.

The Government’s reply was awaited (August 2024) despite reminders.

4.5.6 Rate contract of non-EDL drugs

The status of procurement of non-EDL drugs by UPMSCL during 2018-22 is given in **Table 4.8**.

Table 4.8: Rate contracts of non-EDL drugs

Year	Number of Non-EDL drugs for which RCs executed	RCs for Non-EDL drugs as a percentage of total drugs for which RCs executed	Number of Non-EDL Drugs procured	Percentage of Non-EDL drugs procured against RCs
2018-19	155	47	83	54
2019-20	192	47	110	57
2020-21	221	48	78	35
2021-22	221	46	121	55

(Source: UPMSCL)

As evident from **Table 4.8**, UPMSCL could procure 35 per cent to 57 per cent drugs against executed RCs for non-EDL drugs. Further, RCs executed for non-EDL drugs constituted 46 per cent to 48 per cent of total number of drugs for which RCs were executed during 2018-22.

Audit observed that due to non-participation of bidders and non-responsive bids, RCs could not be finalised, besides longer time taken for execution of contract and short supplies by vendors were main reasons for low supply of drugs.

The Government’s reply was awaited (August 2024) despite reminders.

4.5.7 Good Manufacturing Practice inspection of firms

As per the procurement policy, to ensure quality of drugs, a team of UPMSCL along with official from FSDA will inspect the manufacturing unit to ensure Good Manufacturing Practice (GMP). GMP was to be carried out at all manufacturing premises from which bid is quoted.

It was, however, observed that inspection for ensuring GMP was not carried out by the UPMSCL since inception to March 2022.

The Government’s reply was awaited (August 2024) despite reminders.

4.5.8 Testing and Handling Charges

As per the procurement policy, an amount equal to 1.5 *per cent* value of goods received shall be deducted from payments to be made to the supplier on account of testing and handling charges.

Audit scrutiny revealed that deductions of ₹ 13.69 crore¹⁷ on account of testing and handling charges from the payments of ₹ 912.95 crore during 2018-22 were not made by UPMSCL.

Thus, by not deducting the testing and handling charges from the firms, UPMSCL extended undue financial benefit to these firms.

The Government's reply was awaited (August 2024) despite reminders.

4.6 Short supply of drugs by firms

Drug shortages pose a serious challenge for HCFs, often interfering with patient care. A common practice during a drug shortage is to select an alternate therapeutic; however, these agents often present challenges and may create safety concerns.

As per the procurement policy, if the supplier fails to execute at least 50 *per cent* of the ordered quantity for any drug for more than two purchase orders, the supplier shall be debarred for supply of that particular drug for a period of two years.

During the period 2018-22, UPMSCL issued 3,239 purchase orders (POs) for supply of drugs against which 100 *per cent* supply was received in respect of only 446 POs (13.77 *per cent*). The details of short supplies during 2018-22 are given in **Table 4.9**.

Table 4.9: Short supply of drugs

Year	Total number of POs issued	No. of cases where less than 50 <i>per cent</i> supplies including NIL supplies received against POs (<i>per cent</i>)	No. of cases where between 50 <i>per cent</i> and less than 100 <i>per cent</i> supply received against POs (<i>per cent</i>)	Value of POs (₹ in crore)
2018-19	456	62 (13.60)	381 (83.55)	182.90
2019-20	1006	240 (23.86)	735 (73.06)	623.21
2020-21	544	157 (28.86)	289 (53.13)	344.41
2021-22	1233	371 (30.09)	558 (45.26)	1234.96
Total	3239	830 (25.63)	1963 (60.61)	2385.48

(Source: UPMSCL)

It may be seen from **Table 4.9** that against 3,239 purchase orders valuing ₹ 2,385.48 crore issued during 2018-22 by UPMSCL, short supplies were made in 2,793¹⁸ (86 *per cent*) purchase orders including 659 cases where no supply

¹⁷ 19 firms in 2018-19 (₹ 0.37 crore), 91 firms in 2019-20 (₹ 4.86 crore), 93 firms in 2020-21 (₹ 2.21 crore) and 161 firms in 2021-22 (₹ 6.25 crores).

¹⁸ 830 + 1,963 = 2,793

was made by the suppliers. The details of nil and 100 per cent supplies are given in **Table 4.10**.

Table 4.10: Zero and 100 per cent supply of drugs

Period	Total number of POs issued	No. of POs in which nil supply received (per cent)	No. of cases in which 100 per cent supplies were received
2018-19	456	43 (9.43)	13 (2.85)
2019-20	1006	172 (17.10)	31 (3.08)
2020-21	544	123 (22.61)	98 (18.01)
2021-22	1233	321 (26.03)	304 (24.66)
Total	3239	659 (20.35)	446 (13.77)

(Source: UPMSCL)

It was, however, observed that though the policy has clearly mentioned to debar the supplier in the event of supply of drugs below 50 per cent, no action was taken by the UPMSCL against these suppliers.

The Government's reply was awaited (August 2024) despite reminders.

4.7 Delayed supply of drugs

The policy and contract condition stipulates that the contracted firms would supply drugs within 60 days from the date of issue of purchase order (extendable up to 90 days) failing which the supplier firms would be liable to be imposed penalty at prescribed rates by UPMSCL¹⁹.

Analysis of data made available by the UPMSCL revealed that there were inordinate delays in supply of drugs during September 2018 to March 2022²⁰ as detailed in **Table 4.11**.

Table 4.11: Delayed supply of drugs

Delay in supply of drugs (Number of days taken for supply from the date of issue of PO)	Amount (₹ in crore)
More than 120 days	102.68
Between 91 days to 120 days	154.88
Total	257.56

(Source: UPMSCL)

It is evident from **Table 4.11** that against the policy, drugs valuing to ₹ 257.56 crore were supplied beyond the prescribed (extendable) 90 days from the date of issue of PO. Analysis of cases falling under supplies made beyond 120 days revealed that UPMSCL received drugs as late as 548 days as detailed in **Table 4.12**.

Table 4.12: Delayed supply of drugs

Particulars	Amount (₹ in crore)
Between 121 to 200 days	84.98
Between 201 to 300 days	11.67
Between 301 to 400 days	4.75
Between 401 to 500 days	0.71

¹⁹ The supplies must be initiated within 45 days of release of purchase order and completed within 60 days. Supplies can be received up to 90th day with 0.2% liquidated damage (LD) charge per day of the value of goods supplied with delay. On completion of 90 days, the purchase order shall stand cancelled and penalty of flat 20% shall be levied on value of unexecuted portion.

²⁰ Excluding Covid-19 relaxation period (January 2020 to June 2020 and April 2021 to June 2021).

Particulars	Amount (₹ in crore)
More than 500 days	0.57
Total	102.68

(Source: UPMSCL)

As evident from **Table 4.12**, due to not following the drug procurement policy of UPMSCL, drugs valuing ₹ 102.68 crore were accepted from suppliers even after lapse of more than 120 days. This indicates that the monitoring and internal control of the UPMSCL was weak. It may be mentioned that production of drugs valuing ₹ 16.98 crore was started by some of the firms even after 90 days from the issuance of POs.

The State Government (MHFW) replied (February 2023) that by the end of 2019-20, Covid-19 disaster had spread worldwide and only emergency services were in operation. Keeping difficulty in supply, permissions were granted for extension of purchase order.

Reply was not acceptable, as Covid-19 relaxation period (January 2020 to June 2020 and April 2021 to June 2021) has already been excluded in the audit observation.

4.8 Shelf life of drugs

The procurement policy envisages that general drugs with minimum 80 *per cent* and vaccines & imported drugs with minimum 60 *per cent* shelf life, respectively, shall be accepted. Further, consignment with lower residual shelf life can be accepted if the supplier undertakes to take back the unconsumed quantity, if expired, and pay back the corresponding amount. In any case, drugs with below 50 *per cent* residual shelf life shall not be accepted.

Status of drugs received at UPMSCL during 2018-22, with the shelf life is detailed in **Table 4.13**.

Table 4.13: Short shelf life of drugs

Year	₹ in lakh	
	Cost of general drugs received with less than 80 <i>per cent</i> shelf life	Cost of Imported drugs/ Vaccines received with less than 60 <i>per cent</i> shelf life
2018-19	774.75	35.38
2019-20	2112.92	178.08
2020-21	761.37	4.49
2021-22	1040.52	0.00
Total	4689.56 say ₹ 46.90 crore	217.95 Say ₹ 2.18 crore

(Source: UPMSCL)

Table 4.13 shows that UPMSCL accepted supplies of drugs amounting to ₹ 46.90 crore having shelf life of less than 80 *per cent* and imported drugs/vaccines amounting to ₹ 2.18 crore with less than 60 *per cent* shelf life. Further, it was also observed that as per policy, shelf-life relaxation was given to 19 firms, and they supplied drugs valued to ₹ 4.53 crore with shelf life of 50 *per cent*. Owing to less shelf life, drugs valuing ₹ 2.65 crore (58.58 *per cent*) got expired in the warehouses of UPMSCL, however no recoveries from the concerned firms were made as of March 2022.

While accepting the facts and figures, UPMSCL stated (July 2022) that notices to vendors have been issued. It further stated that due to wrong checks in the DVDMS, drugs with less than 50 *per cent* shelf life were accepted.

The State Government (MHFW) further replied (February 2023) that due to Covid-19 conditions and as per terms and conditions of the tender documents, exemption for shelf life upto 50 *per cent* was given against the undertakings furnished by the firms.

The reply of State Government was not acceptable as besides Covid-19 period (2020-22), UPMSCL accepted drugs and vaccines with less shelf life than prescribed under drug policy. Further, UPMSCL has accepted that drugs with less than 50 *per cent* shelf life was accepted due to wrong checks in DVDMS software.

4.9 Expiration of drugs

The supply chain management department in UPMSCL is responsible for the supervision of the performance of operations at all the warehouses related to stock handling, store keeping, MIS operations, Logistics, etc.

Audit, however, observed that, drugs valuing ₹ 27.06 crore got expired in the warehouses of UPMSCL during March 2020 to March 2022, out of expenditure on procurement of drugs to the tune of ₹ 1,978.50 crore (2019-22). It is pertinent to mention that drugs amounting to ₹ 15.80 crore alone got expired at the Central Warehouse located at Lucknow. Details of expired drugs are given in **Table 4.14**.

Table 4.14: Expiration of drugs

Year	Total cost of drugs expired at Warehouses (in ₹)
2019-20	84,854
2020-21	1,98,17,996
2021-22	25,06,61,301
Total	27,05,64,151 say ₹ 27.06 crore

(Source: UPMSCL)

Audit further observed that both EDL and non-EDL drugs got expired. The details of which are given in **Table 4.15**.

Table 4.15: Expiration of EDL and non-EDL drugs

Year	Value of EDL drugs expired at warehouse level (₹)	Value of Non-EDL drugs expired at warehouse level (₹)
2019-20	84,854	0
2020-21	1,78,10,097	20,07,899
2021-22	17,86,72,001	7,19,89,300
Total	19,65,66,952 say ₹ 19.66 crore	7,39,97,199 say ₹ 7.40 crore
Proportion of EDL vs. Non-EDL (in per cent)	72.65	27.35

(Source: UPMSCL)

It is evident from above that the drugs expired at the warehouse of UPMSCL included 72.65 *per cent* of essential drugs and 27.35 *per cent* of non-essential drugs. The supply chain management did not take cognisance of it as it failed to follow the responsibility of supervision of the performance of operations at warehouses. As a result, expiry of drugs valuing ₹ 27.06 crore led to loss to the Government to that extent since there was no provision in the SOP and contract conditions to transfer the responsibility of near expiry/slow moving/non-moving items on the suppliers as discussed under **Paragraph 4.9.1**.

Scrutiny of records of test-checked districts further revealed that in four out of 16 district hospitals, drugs also got expired as detailed in **Table 4.16**.

Table 4.16: Expiry of drugs at test-checked hospitals

District	Hospital	Number of drugs expired	Quantity received	Quantity distributed	Quantity of expired in hand
Hamirpur	DWH	18	284550	204090	80460
Kanpur Nagar	DWH	3	650	379	271
Lucknow	Balrampur Hospital	9	2606000	1870500	735500
Saharanpur	DHM	65	2175071	1122898	1052173
Total			5066271	3197867	1868404

(Source: Test-checked districts)

It may be seen from above that out of 50.66 lakh units of drugs received in four DHs, 31.98 lakh units were distributed and remaining 18.68 lakh units (37 per cent) got expired. Audit observed that low shelf life of drugs (**Paragraph 4.8**), refusal of drugs by consignee warehouses due to sufficient stock and lack of space (**Paragraph 4.11.1**), etc. were some of the reasons for expiration of drugs.

Further, records of the test-checked GMCs revealed that during 2020-21, in GMC Ambedkar Nagar, 13 drugs (quantity 1,45,918) valuing ₹ 10.95 lakh and in GMC, Meerut, two drugs (quantity 6,458) valuing ₹ 45.92 lakh (total ₹ 56.87 lakh) also got expired, respectively.

The State Government (MHFW) replied (February 2023) that 2020-22 being the Covid-19 years, most part of this period was under lockdown. Due to this, there was a decrease in general patients which also led to less consumption of drugs. As such, expiration of drugs could not be ruled out. However, reply of MET was awaited (August 2024) despite reminders.

The reply of MHFW was not acceptable, since in addition to less consumption of drugs due to decrease in general patients during Covid-19 lockdown period, acceptance for drugs even with less than 50 per cent shelf life and consignment of drugs to warehouses/HCFs without demand due to inadequate supply chain management of UPMSCL was also responsible for expiration of drugs.

4.9.1 Standard operating procedure for expired drugs

The procurement policy does not mention treatment for expired drugs. The Standard Operating Procedure (SOP) of expired drugs was approved in 11th Board Meeting of UPMSCL (June 2021). SOP provides regular monitoring of drugs nearing expiration to prevent expiration. However, there was no provision in the SOP to transfer the responsibility of near expiry/ slow moving/non-moving items on the suppliers. Further, expired drugs were to be disposed off as per BMW Rules, 2020 and cost of the disposal of the expired finished goods was to be borne by the UPMSCL itself.

Audit, however, observed that even after framing SOP in June 2021, which envisages monitoring of drugs nearing expiration, drugs costing ₹ 20.47 crores

got expired between July 2021 to March 2022 (76 per cent of the total cost of ₹ 27.06 crore of expired drugs).

It is pertinent to mention that Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, a State Government University, has made the suppliers responsible to have the status of slow/ non-moving inventory for replacement purposes from Hospital Revolving Fund stores on quarterly basis or at a higher frequency. If suppliers fail to replace such slow moving / non-moving stocks in time, institute has the right to identify such stocks any time during the contract period and return the same to the supplier. Cost of such returned inventory is recoverable from forthcoming bill of the supplier or replaced with any other approved stocks failing which contract may be terminated. UPMSCL could also have included this practice in its SOP for supply chain management of drugs.

The Government's reply was awaited (August 2024) despite reminders.

4.9.2 Disposal of expired drugs

Scrutiny of records revealed that the UPMSCL entered (30 March 2022) into an agreement for 'Collection, Transportation, Treatment, Disposal of expired drugs' with M/s Medical Pollution Control Committee, Kanpur for one year (till 31 March 2023). As per the terms and conditions of the contract, on receipt of the work order, the firm was to collect, transport, treat and dispose off the expired drugs from 75 UPMSCL warehouses in the State within 120 days. A certificate to this effect was also to be provided to the UPMSCL by the firm. UPMSCL was also to depute a nodal officer for ensuring timely verification of performance of the firm.

Audit, however, observed that as of October 2022 (after lapse of 90 days), only 40 districts were covered by the firm.

Further, no measure was taken by the GMC, Ambedkar Nagar for disposal of expired drugs and these medicines were lying in store.

The Government's reply was awaited (August 2024) despite reminders.

4.10 Quality control of drugs

As per the Drug Procurement Policy, sample of all batches of all products received through UPMSCL central procurement was subject to quality testing by the empanelled NABL²¹ accredited drug testing laboratory/Government laboratory for confirmation of quality. Drugs shall be deemed finally accepted and eligible for payment when batch is declared as of standard quality based on reports of empanelled lab.

4.10.1 Inspection and empanelment of the laboratories

UPMSCL decided²² that General Manager (Quality Control), UPMSCL or his authorised representative(s) may inspect any empanelled laboratory, at any point of time during the continuance of the empanelment and terminate/ cancel its empanelment or any orders issued to the laboratory or not to entrust any

²¹ National Accreditation Board for Testing and Calibration Laboratories

²² In its 3rd meeting of Board of Directors dated 12 July 2018

further testing job to the laboratory based on the facts brought out during such inspections if the laboratories do not fulfil the desired protocol.

Audit observed that UPMSCL floated tender in May 2018²³ for empanelment of laboratories and empanelled (December 2018) 11 NABL accredited testing laboratories²⁴ for the quality tests of procured drugs. However, these empanelled laboratories started testing of drugs for quality assurance from June 2019. Further, inspection of empanelled laboratories was not carried out by the UPMSCL during 2018-22.

The Government's reply was awaited (August 2024) despite reminders.

4.10.2 Sample tests of drugs

The status of batches of drugs tested for quality and coverage of sample testing is detailed in **Table 4.17**.

Table 4.17: Status of batches tested and coverage of the sample tested drugs

Year	Total number of batches of drugs procured by UPMSCL	Number of batches exempted from quality tests	Actual number of batches needs to be checked	Total number of batches tested for quality	Details of HCFs/ warehouse and period during which samples of drugs taken	Percentage of quality tests vis-à-vis batches required testing
2018-19	2056	37	2019	Not started	Nil	Nil
2019-20	10658	60	10598	795	Sample taken from only one warehouse (TP Nagar Lucknow) during 20 June 2019 to 17 December 2019	8
2020-21	5351	26	5325	1184	Sample taken from 71 districts during 1 July 2020 to 31 March 2021	22
2021-22	11404	106	11298	3153	Sample taken from all the 75 districts during 1 April 2021 to 03 June 2021 and 11 August 2021 to 31 March 2022	28
Total	29469	229	29240	5132		18

(Source: UPMSCL)

As evident from **Table 4.17**, during the period 2019-20, samples were taken for quality assurance from only one warehouse located at Lucknow. Resultantly, the drugs received in remaining 74 districts were not tested. However, during 2020-21 and 2021-22, samples of drugs were taken from 71 districts and 75 districts of the State respectively.

In 2019-20 (April, May, January, February and March), in 2020-21 (April, May and June) and in 2021-22 (June, July) the samples were not taken, and thus, required quality tests were not done by UPMSCL, though the supplies were made by the vendors every month. Further, out of total supplied batches of

²³ Tender invited on 04-05-2018 and agreement executed on 4 March 2019.

²⁴ Alcatec Research Lab. India Ltd., Delhi Test House Pvt. Ltd., Devansh Testing Research Lab. Pvt. Ltd., Interstellar Testing centre Pvt. Ltd., ITL Labs Pvt. Ltd., Shree Balaji Test Lab. Pvt. Ltd., Shree Krishna Analytical Service Pvt. Ltd., Standard Analytical Laboratory Pvt. Ltd. Sophisticated Industrial Material Lab Pvt. Ltd., Manisha Analytical Laboratories Pvt. Ltd., and Shriram Institute for industrial research.

drugs, only 18 *per cent* batches got tested. Thus, UPMSCL failed to adhere to the provisions of drug procurement policy requiring quality test of all batches of all drugs.

Audit noticed that UPMSCL directed (November 2019) all CMOs to stop sending samples of drugs received by the various HCFs to the quality department of the UPMSCL with the further direction not to keep drugs received from supplier in quarantine area and use these drugs as active stocks. This direction was issued as HCFs in 30 districts did not submit samples of drugs for quality testing and as such, drugs supplied to these districts were kept idle in quarantine area of HCFs. As such, instead of forcing all HCFs to mandatorily send the samples of drugs for quality tests, UPMSCL, relaxed the norms due to which drugs were released to the hospitals without any quality test.

The Government’s reply was awaited (August 2024) despite reminders.

4.10.3 Quality tests of EDL and Non-EDL

The status of drugs tested against the EDL and non-EDL drugs is given in Tables 4.18 (A) and (B).

Table 4.18(A): Quality tests of EDL drugs

Year	No. of drugs in EDL	No. of Drugs procured against EDL	No. of drugs tested against procured EDL	Percentage of tests done against EDL
2018-19	1084	145	00	00
2019-20	1084	206	125	61
2020-21	295	169	75	44
2021-22	295	258	177	69

(Source: UPMSCL)

Table 4.18(B): Quality tests of Non-EDL drugs

Year	No. of Non-EDL drugs procured	No. of Non-EDL drugs tested	Percentage of tests of Non-EDL drugs
2018-19	83	0	00
2019-20	110	0	00
2020-21	78	13	17
2021-22	121	06	5

(Source: UPMSCL)

As evident from the tables above, the percentage of tests of drugs against EDL was ranging between 44 *per cent* and 69 *per cent* (2019-22) while for Non-EDL drugs it was very low (5 *per cent* and 17 *per cent*) during 2020-22. Thus, large number of Non-EDL drugs were left untested for quality assurance while the quality assurance in case of EDL drugs was also not encouraging.

The Government’s reply was awaited (August 2024) despite reminders.

4.10.4 Delays in furnishing quality test reports

As per Quality Policy of UPMSCL, the allowable time for testing of sample and furnishing certificate of analysis shall be 10 days of the receipt of samples in case of tablets, capsules, external preparations, liquid oral preparations, Surgical dressings and 21 days from the receipt of samples in case of I.V. fluids, small volume injectable, eye/ear drops, disinfectants and those items requiring

microbiological tests. Penalty provisions for delay in test and other obligations was to be defined in tender documents as per statutory/technical/operational requirement.

Scrutiny of the records revealed that there were delays in reporting of the test results by the labs as detailed in **Table 4.19**.

Table 4.19: Delays in furnishing quality test reports

Year	Total Number of Batches tested	Test reports for number of batches delayed (1 to 10 days)	Test reports for number of batches delayed (11 to 20 days)	Test reports for number of batches delayed (21 to 30 days)	Test reports for number of batches delayed (more than 30 days)
2019-20	795	134	19	20	06
2020-21	1184	295	83	44	109
2021-22	3153	881	338	142	192
Total	5132	1310 (25.52 per cent)	440 (8.57 per cent)	206 (4.01 per cent)	307 (5.98 per cent)

(Source: UPMSCL)

As evident from **Tables 4.17** and **4.19**, only 18 per cent batches of drugs received from supplier were lab tested for quality assurance and even the test reports were delayed in 44 per cent cases which included delays of more than 30 days in six per cent cases. As a result, drugs distributed to various HCFs of the State were subsequently found NSQ (not of standard quality) but by that time consumed by the end users as discussed in **Paragraph 4.10.5**. Further, the details of the penalty levied by UPMSCL on empanelled laboratories was not provided to audit.

The Government's reply was awaited (August 2024) despite reminders.

4.10.5 Not of Standard Quality (NSQ) Drugs

NABL accredited drug testing laboratories, appointed by UPMSCL, were to test drugs. Drugs found not fit for consumption were to be treated as NSQ drugs.

Audit observed that during 2018-22, against the purchase orders issued by UPMSCL, two firms were debarred/ blacklisted²⁵ as a whole for supply of any drugs for the period of three years and eight firms debarred/blacklisted for one drug²⁶. Further, 64 batches of procured drugs were declared NSQ by UPMSCL as detailed in **Table 4.20**.

Table 4.20: Not of Standard Quality Drugs

Year	Number of Batches tested	Number of batches declared NSQ	Percentage of NSQ vis-à-vis batches tested
2018-19	Drugs were not tested during 2018-19 for quality assurance.		
2019-20	795	31	4
2020-21	1184	14	1
2021-22	3153	19	1
Total	5132	64	1

(Source: UPMSCL)

²⁵ M/s Grampus Laboratories and M/s Himalaya Meditek Pvt. Ltd.

²⁶ As per Drugs procurement policy of UPMSCL, if any one batch of any drug is found to be spurious or adulterated, the vendor shall be blacklisted as whole for three years. If two batches of any drug supplied by a vendor are found not of standard quality (except spurious or adulterated), then the vendor shall be blacklisted for that particular drug for a period of three years. If a supplier is blacklisted for more than two products for quality issues, then the supplier shall be debarred as whole for a period of three years.

Further, these 64 batches were declared NSQ between 30 March 2019 and 02 March 2022. The details of NSQ drugs received vis-à-vis their consumption was as per **Table 4.21**.

Table 4.21: Distribution of NSQ drugs

Particulars	Total quantity of drugs (2019-22) (quantity in lakh & value in crore)					
	Received		Consumed		In hand	
	Quantity	Value	Quantity	Value	Quantity	Value
HCFs	16263.90	113.10	81.06	1.19	16182.84	111.91
District Ware Houses	1449.04	13.89	138.38	1.33	1310.66	12.56
Total	17712.94	126.99	219.44	2.52	17493.50	124.47

(Source: UPMSCL)

As evident from **Table 4.21**, NSQ drugs worth ₹ 126.99 crore (quantity 17712.94 lakh units) received by the UPMSCL was 15 per cent of total procurement of drugs (1,18,095 lakh²⁷ units) during 2019-22. Of which, NSQ drugs worth ₹ 2.52 crore (quantity 219.44 lakh units) were consumed after being released from the district warehouses and various health institutions of Uttar Pradesh. The reason for consumption of NSQ drugs was distribution of drugs to HCFs without quality test of all batches of drugs supplied as discussed in **Paragraph 4.10.2**. Resultantly, these drugs were consumed through district warehouses and hospitals in the intervening period of sample collection and declaring them NSQ.

The status of supply of NSQ drugs to the test-checked HCFs and consumption thereof is given in **Table 4.22**.

Table 4.22: Distribution of NSQ drugs in test-checked HCFs

Test-checked HCFs	Total quantity of NSQ drugs received (in unit)	Quantity of NSQ drugs distributed (in unit)
CMO, Saharanpur	110675	109665
CMO, Ghazipur	500	180
CMO, Lucknow	8300	6900
CMO, Jalaun	13670	13025
DWH, Kanpur Nagar	2750	1270
DHM, Lucknow	180920	109000
DHM, Saharanpur	48140	47545
DHM, Kanpur Nagar	19740	19740
Total	384695	307325

(Source: Test-checked DHs)

Table 4.22 shows that out of total quantity of 3.85 lakh units of NSQ drugs received at CMOs and DHs, 3.07 lakh units (80 per cent) were distributed to the patients as detailed in **Appendix 4.3**. Test-checked HCFs replied that NSQ reports were either received with delay or not received due to which drugs were distributed and the distribution of NSQ drugs stopped after receipt of lab reports.

The Government's reply was awaited (August 2024) despite reminders.

²⁷ DGMH: 70,968 lakh units; NHM: 47,096 lakh units and MET: 31 lakh units; total 1,18,095 lakh units drug including tablets, capsules, injection, syrups, etc.

4.10.6 Quality tests by drug inspectors

As per directions (May 2005) of DGMH, Drug Inspectors (DIs) were to collect samples from the hospitals for further laboratory analysis.

The status of tests performed by collecting the samples in the State (including Government hospitals, manufacturing units and sale unit) and results thereagainst is given in **Table 4.23**.

Table 4.23: Quality tests by drug inspectors- State as a whole

Year	Target	Samples collected (per cent)	Samples tested (per cent)	Samples found NSQ	Samples found spurious
2017-18	12000	10644 (89)	10110 (95)	304 (3)	25 (0.25)
2018-19	12000	7974 (66)	7404 (93)	190 (3)	76 (1)
2019-20	12000	8835 (74)	8123 (92)	235 (3)	94 (1)
2020-21	12000	5717 (48)	4766 (83)	185 (4)	45 (1)
2021-22	12000	5750 (48)	4770 (83)	Not available	Not available

(Source: Performance Report 2022-23 of MHFW Department)

*The information of NSQ and spurious samples were not available in the Performance Report of MHFW Department for the year 2022-23.

As evident from above, against the targeted samples to be collected, collection of samples was ranging between 48 per cent and 89 per cent during 2017-18 to 2021-22. Of these, samples ranging from 83 per cent to 95 per cent were tested during the same period. Three per cent to four per cent samples were found NSQ whereas 0.25 per cent to 1 per cent samples tested reported to be spurious.

The status of samples taken by the DIs in both test-checked GMCs is given in **Table 4.24**.

Table 4.24: Quality tests by drug inspectors in GMCs

Year	GMC, Ambedkar Nagar		GMC, Meerut	
	Number of drugs sampled	Number of substandard drugs	Number of drugs sampled	Number of substandard drugs
2016-17	16	01	No sampling	NA
2017-18	15	01	No sampling	NA
2018-19	06	01	31	0
2019-20	12	00	14	6
2020-21	13	00	No sampling	NA
2021-22	13	00	00	00
Total	75	03 (4 per cent)	45	6 (10 per cent)

(Source: Test-checked GMCs) (NA = Not applicable)

As evident from **Table 4.24** that during 2016-22, three out of 75 drugs sent for quality tests in GMC, Ambedkar Nagar, were found substandard whereas six out of 45 drugs were found substandard during the same period in GMC, Meerut. Audit noticed that till the receipt of test results, GMC Ambedkar Nagar distributed 91 per cent and 100 per cent of stock of these substandard drugs to patients, whereas in GMC Meerut, the distribution of stock of these substandard drugs was ranging between 45 per cent and 100 per cent. Both GMCs did not furnish certificate issued by NABL to audit due to which quality assurance of the drugs could not be ascertained.

Audit further observed that very few samples were taken by the DIs for tests from the test-checked DHs and CMOs as detailed in **Table 4.25**.

Table 4.25: Quality tests by drug inspectors in DHs and CMOs

Year	Number of test-checked DHs & CMOs from where samples selected	Number of drugs taken by DI for test	Report received against samples taken (<i>per cent</i>)	Number of samples found NSQ
2016-17	7	58	5 (09)	5
2017-18	5	31	0 (00)	0
2018-19	9	78	4 (05)	4
2019-20	13	116	18 (16)	4
2020-21	7	34	3 (09)	3
2021-22	5	40	3 (08)	3
Total		357	33 (09)	19

(Source: Test-checked DHs and CMOs)

Table 4.25 shows that all the test-checked 16 DHs and nine CMOs were not covered by DIs during 2016-22. The range of coverage was between five and 13. Further, against the samples taken by DIs, reports were received in only nine *per cent* cases as detailed in **Appendix 4.4**.

The State Government (MHFW) replied (February 2023) that quality tests of medicines pertain to the Department of Food Safety and Drug Administration. However, reply of MET was awaited (August 2024) despite reminders.

The fact remains that Drug Inspectors did not take samples from all the test-checked hospitals during 2016-22 due to which quality assurance of the drugs could not be ascertained.

4.10.7 Disposal of NSQ drugs

As per the UPMSCL policy, in case, the supplier does not take the stock of NSQ drugs back within prescribed timeline, the stock of NSQ shall be destroyed after lapse of 90 days.

It was, however, observed that in contravention to the provision laid down in the policy, neither any vendor took back the stock of NSQ drugs nor were these drugs destroyed. Resultantly, NSQ drugs remained in the stocks of warehouses, CMOs and District Hospital as of March 2022.

The Government's reply was awaited (August 2024) despite reminders.

4.11 Supply chain management

Supply Chain wing of UPMSCL is responsible to ensure supply of drugs, consumables and medical equipment in the State by doing continuous adequacy planning as per the demands, oversee inventory analysis and management of drugs at warehouses, supervise timely generation of purchase order to ensure fast and efficient release of purchase orders, oversee the performance of operations of the warehouses, co-ordinate with quality control department to ensure fast and efficient quality assurance process and monitor the distribution, safe and timely delivery of drugs from warehouses to HCFs of the State.

Audit observed that:

- During 2018-22, supply chain management wing of UPMSCL did not efficiently fulfil its mandated role which resulted in short supplies (**Paragraph 4.6**), delayed supplies (**Paragraph 4.7**), distribution of drugs to HCFs without ensuring quality resulting in supply of NSQ drugs to patients (**Paragraph 4.10.5**), consignments of drugs to warehouses without demand (**Paragraph 4.11.1**), shortage of storage facility, etc., in warehouses/HCFs where these were transferred (**Paragraph 4.11.2**).
- Warehouse manual was not approved by BoD as of March 2022 resultantly UPMSCL had no standard norms for monitoring performance of warehouses which ultimately affected the store keeping and stock handling of drugs. As a result, drugs/medicines to the tune of ₹ 27.06 crore got expired in the various warehouses (**Paragraph 4.9**).
- Supply chain management department of UPMSCL was not monitoring the distribution and stock position of the equipment procured and supplied by the UPMSCL to the warehouses and various health facilities of the State. UPMSCL attributed (July 2022) the unavailability of bio-medical engineer as the reason for lack of supply chain monitoring of equipment.

UPMSCL replied (July 2022) that participation of supply chain management in generation and release of purchase orders had been commenced from April 2022. It further stated that planning would be done in future and ensuring coordination between Supply Chain wing and Quality Control wing have been noted for future compliance.

The State Government (MHFW) replied (February 2023) that a State Standing Committee has been constituted for supply chain management which determines the quantity relating to the purchase orders. Year 2020-22 being the Covid-19 disaster years, most part of this period was under lockdown. Due to this, there was a decrease in general patients which also led to less consumption of drugs. As such, expiration of drugs could not be ruled out. UPMSCL does not supply the NSQ drugs. The situation might have developed in first phase since drugs were being directly supplied to the hospitals due to unavailability of warehouses. Further, supply chain is directly monitored by the department for which sufficient human resource is available. MHFW further stated that all warehouse in-charge are pharmacist with sufficient experience and instructions are issued from time to time through monitoring of stock in DVDMS.

The reply was not acceptable, as in addition to less consumption of drugs during Covid-19 lockdown period, acceptance of drugs even with less than 50 *per cent* shelf life and consignment of drugs to warehouses/HCFs without demand due to inadequate supply chain management of UPMSCL was also responsible for expiration of drugs. UPMSCL had stated (October 2022) that drugs with less than 50 *per cent* shelf life was accepted due to wrong checks in DVDMS software. So far as reply that the NSQ drugs were supplied by HCFs in initial phase only, the reply is not acceptable as UPMSCL's district warehouses had also supplied NSQ drugs to HCFs. Further, as accepted by UPMSCL itself, supply chain management with respect to generation and release of purchase orders could be commenced only in April 2022. Besides, the State Standing Committee for supply chain management of drugs were constituted only in

June 2022. Thus, there was lack of adequate monitoring in supply chain management of UPMSCL.

4.11.1 Refusal to accept drugs by consignee

One of the key aspects of the supply chain management is to plan the supplies of the drugs, consumables and medical equipment as per the demands.

Audit scrutiny of records and information provided by UPMSCL revealed that during 2019-22, drugs to the tune of ₹ 14.67 crore (Quantity 16.16 crore units) issued to various warehouses got rejected as summarised in **Table 4.26**.

Table 4.26: Drugs not accepted by warehouses

Year	Quantity of rejected drugs by various warehouses (in number)	Cost of Rejected/ Refused Drugs (amount ₹ in crore)
2019-20	30917536	4.05
2020-21	27395398	2.87
2021-22	103311644	7.75
Total	161624578	14.67

(Source: UPMSCL)

The reasons for rejection were mainly no demand, sufficient stock, lack of space, below 80 per cent shelf life, etc. Audit further observed that drugs after being rejected by the warehouses/facilities were diverted to other warehouses/facilities. However, due to rejection/refusal of receiving drugs by the warehouses/facilities, drugs valued ₹ 1.75 crore (quantity: 1.25 crore units) got expired in warehouses.

The Government's reply was awaited (August 2024) despite reminders.

4.11.2 Storage of drugs

Parameters for the storage of drugs in stores has been stipulated in the Drugs and Cosmetic Rules, 1945, which deals with maintaining the efficacy of the procured drugs before issue to patients.

IPHS provides norms for establishment of availability of beds in district hospitals based on population of the district. Audit noticed that UPMSCL did not have any criteria for fixing the area required for warehouses for storage of drugs based on population of the district²⁸. However, UPMSCL in its tender documents for renting of warehouse laid down different areas for warehouses in different districts ranging between 9,000 sq. ft. to 12,000 sq. ft. Audit further observed that out of 76 warehouses in districts, area of 59 warehouses were less than the area required by UPMSCL as given in **Table 4.27**.

Table 4.27: Drugs warehouses with different area

Number of warehouses having more than 75 to 99 per cent prescribed area	Number of warehouses having 50 per cent to 74 per cent prescribed area	Number of warehouses having less than 50 per cent prescribed area	Number of warehouses having prescribed area	Number of warehouses having more than 100 per cent prescribed area	Total
25	16	18	11	06	76

(Source: UPMSCL)

²⁸ Warehouse at Baghpat had an area of only 600 sq.ft. though the area of the city is 1321 sq. km with a population of 13.03 lakh as per website Baghpat.nic.in.

As evident from **Table 4.27**, 59 (78 per cent) warehouses of UPMSCL did not have the area required by it. Further, it was observed that due to lesser area than required, warehouses in these districts, such as Sant Kabir Nagar, Ayodhya, Bareilly, Kanpur Dehat, etc., refused to take supply of drugs issued to them and thus, the drugs were diverted to other warehouses as discussed in the preceding paragraph.

Based on the criteria given in the bid documents of UPMSCL for renting warehouses, GoI draft guidelines on good distribution practices for pharmaceutical products and WHO's technical guidance for norm for storage facility, a survey of 37 district warehouses conducted by audit revealed that drugs/ medicines were stored in these warehouses by flouting the norms prescribed for it. **Table 4.28** shows that various facilities were lacking in these warehouses.

Table 4.28: Facilities in drugs warehouses

Sl. No.	Criteria	Shortfall in warehousing facilities (per cent)
1	Approximate distance of warehouse from CMO office (it should be within 15 km from CMO office)	14
2	Seepage on ceiling and floor	35
3	Availability of boundary wall and gate	49
4	Gate without enough width for heavy vehicle to enter.	38
5	Unavailability of exhaust fans.	65
6	Unavailability of adequate lighting facility.	22
7	Unavailability of power back-ups.	22
8	Unavailability of firefighting system	16
9	Unavailability of dedicated guard room.	54
10	Unavailability of written programme for pest control	100
11	Unavailability of procedures for clean-up of spillage to ensure removal of contamination.	92
12	Pharmaceutical product not stored off the floor	97
13	Unavailability of dedicated area(s) with appropriate additional safety and security measures for storage of radioactive materials, narcotics and other hazardous, etc.	89
14	Unavailability of records for temperature monitoring data.	95
15	Interval for checking temperature not defined.	95
16	Temperature checking at defined intervals not done.	95
17	Non-installation of temperature monitors in areas that are most likely to show fluctuations.	95
18	Non-maintenance of monitoring records for at least the shelf-life of the stored product plus one year	51
19	Unavailability of cold rooms and freezer rooms for storing sub-zero, +2 degree to +8 degree drugs.	89

(Source: UPMSCL warehouses in 37 districts)

Table 4.28 shows that substantial number of warehouses did not have cold rooms and freezer rooms required for the storage of certain type of drugs and vaccines. Further, none of the warehouse had the written programme for pest control whereas in 97 per cent warehouses, the drugs were not stored off the ground. These indicators were clearly indicating that warehouses were in bad shape and devoid of basic infrastructure required for storage of drugs.

The Government’s reply was awaited (August 2024) despite reminders.

4.12 Availability of consumables

Audit analysed the availability of consumables in the test-checked GMCs, DHs, CHCs and PHCs. The results have been discussed in the succeeding paragraphs:

4.12.1 Status of stock-out of consumables

The status of stock-outs of selected 43 consumables²⁹ in test-checked GMCs during 2018-21 is shown in **Table 4.29**.

Table 4.29: Availability of Consumables in test checked GMCs

Parameters	GMC Ambedkar Nagar			GMC, Meerut		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Selected consumables	43	43	43	43	43	43
Number of consumables not available for one to two months	2	0	1	1	0	1
Number of consumables not available for two to four months	0	0	0	0	1	1
Number of consumables not available for more than four months (in days)	27 (176-364)	26 (145-365)	24 (364)	42 (176-364)	42 (121-365)	41 (121-364)

(Source: GMC, Ambedkar Nagar and Meerut)

Table 4.29 shows that in GMC Ambedkar Nagar, 24 to 27 consumables and in GMC, Meerut, 41 to 42 consumables were not available upto one year during 2018-21. GMCs stated (March/June 2022) that the shortage was managed by patients themselves.

Audit further scrutinised availability of all laboratory reagents and kits (25 to 85) entered in the stock registers and found that many reagents and kits were out of stock for one to four months in both the GMCs as shown in **Table 4.30**.

Table 4.30: Availability of Reagents and kits in the test checked GMCs

Parameters	GMC Ambedkar Nagar			GMC Meerut		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
Stock out of procured reagents kits						
Number of reagents and kits entered into stock register	31	48	48	25	43	85
Number of reagents and kits not available for one days to one month	4	9	12	8	12	33
Number of reagents and kits not available for one to two months	12	7	0	8	11	19
Number of reagents and kits not available for two to four months	9	0	11	5	12	24
Number of reagents and kits not available for more than four months	6	32	25	4	8	9

(Source: Test checked GMCs)

Table 4.30 depicts that stock out of reagents and kits were in increasing order during 2018-21. Due to not procuring full range of consumables and reagent and kits, the possibility of unavailability of related laboratory tests in hospitals and out-of-pocket expenditure from the patients cannot be denied.

²⁹ Based on IPHS Guidelines for District Hospitals (101-500 bedded) Revised 2012

State Government (MET) did not provide reply to audit observation regarding unavailability of consumables in GMCs.

District Hospitals, CHCs and PHCs

Audit had sampled 31 essential consumables³⁰ required for the DHMs / DWHs and CDHs and examined the availability of these consumables in the stock book of 15³¹ out of 16 selected DHs during 2018-19 to 2021-22. Audit noticed that consumables were purchased locally as well as supplied by district drug warehouse of UPMSCCL.

The status of availability of these consumables in test-checked DHs is given in **Appendix-4.5 (A)** and summarised in **Table 4.31**.

Table 4.31: Availability of Consumables in test checked DHs

Types of hospitals	Number of test-checked hospitals	Consumables (in number)					
		Identified for test-checked	Available all times	Never available at all	Available partially	Percentage of availability (all time + partially available)	Stock outs of partially available (in days)
DWHs	7	31	0-10	16-24	4-13	23-48	2-1450
DHMs	6	31	0-8	15-26	4-9	16-52	10-1454
CDHs	2	31	7-9	16-17	5-8	45-48	29-1438

(Source: Test-checked DHs)

Table 4.31 shows that in seven test checked DWHs and six DHMs, the availability of consumables was merely ranging from 23 to 48 *per cent* and 16 to 52 *per cent* respectively. In CDHs, the availability was 45 to 48 *per cent* whereas 15 to 26 consumables (48 *per cent* to 84 *per cent*) were never available in these test-checked hospitals and in all the 15 DHs, the stock outs of some consumables were up to almost four years.

Audit had also sampled³² 12 and 8 consumables for CHCs and PHCs respectively and their availability during 2018-22 were examined in test checked CHCs and PHCs as detailed in **Appendix 4.5 (B)** and summarised in **Table 4.32**.

Table 4.32: Availability of Consumables in test checked CHCs & PHCs

District	Nos. of test-checked hospitals	Consumables (in number)					
		identified for test-check	available all times	Never available at all	available partially	Percentage of availability (all time + partially available)	Stock out partially available (days)
CHCs							
Ghazipur ³³	2	12	0-0	4-7	5-8	42-67	241-1436
Hamirpur	2	12	1-3	4-5	5-6	58-67	219-1458
Kanpur Nagar	2	12	1-1	7-8	3-4	33-42	85-1180
Lucknow	3	12	0-1	3-7	4-9	42-75	88-1456
Kushinagar	2	12	2-2	6-6	4-4	50-50	87-1456
Kannauj	2	12	0-3	7-9	2-3	25-42	285-1426

³⁰ Based on IPHS Guidelines for Sub-District Hospitals (31-100 bedded) Revised 2012

³¹ District Male Hospital, Saharanpur did not provide records.

³² Based on IPHS Guidelines for Community Health Centers Revised 2012 and IPHS Guidelines for Primary Health Centers Revised 2012

³³ Data for 2021-22 was not provided.

District	Nos. of test-checked hospitals	Consumables (in number)					
		identified for test-check	available all times	Never available at all	available partially	Percentage of availability (all time + partially available)	Stock out partially available (days)
Jalaun ³⁴	1	12	0	8-8	4-4	33-33	829-1433
Saharanpur	2	12	4-4	2-3	5-6	75-83	113-1431
Unnao	2	12	2-4	5-7	3-3	42-58	318-1276
PHCs							
Ghazipur	4	8	0	6-8	0-2	0-25	0-1382
Hamirpur	4	8	0	5-8	0-3	0-38	0-1005
Kanpur Nagar	4	8	0	5-7	1-3	13-38	482-886
Lucknow	6	8	0-1	5-6	1-3	25-38	252-1330
Kushinagar	4	8	0	6-7	1-2	13-25	572-1311
Kannauj	4	8	0	5-8	0-3	0-38	0-1128
Jalaun	4	8	0-1	4-6	1-4	25-50	145-1294
Saharanpur	4	8	0-1	5-7	1-3	13-38	203-1454
Unnao	4	8	0-3	4-7	1-2	13-50	927-1228

(Source: Test-checked CHCs & PHCs)

Table 4.32 shows that availability of consumables in 11 test checked CHCs was up to 50 per cent and in seven CHCs it was ranging between 58 per cent and 83 per cent. However, minimum stock out period was ranging between 85 (in CHC Sarsaul, Kanpur Nagar) and 829 days (in CHC Kadaura, Jalaun). The maximum stock out period of partially available consumables was approximately four years (1,458 days) in CHC, Sarila in Hamirpur. Further, in four PHCs, sampled consumables were not available during 2018-22.

The State Government (MHFW) replied (February 2023) that for consumables or reagents required for an equipment (close system), the UPMSCL determines the rate of consumables/ reagents with the purchase of equipment. The hospitals purchase these at their own level.

The reply was not acceptable, as one of the functions of UPMSCL was to purchase consumables for hospitals in the State as per mandate prescribed under State Government order (October 2017) for the establishment of UPMSCL. However, various test-checked consumables were not available at all level of hospitals. Thus, neither these consumables were supplied centrally nor purchased locally.

4.13 Implementation of Drugs and Vaccines Distribution Management System

As per Memorandum of Understanding³⁵ of Drugs and Vaccines Distribution Management System (DVDMS), there were seven modules for the implementation of DVDMS in the State namely: Procurement, Logistics, Finance, Quality Control, Sub-store and drug distribution centre, District drug warehouse and IT cell.

³⁴ CHC-Jalaun did not produce records to audit.

³⁵ MoU was executed on 27 September 2016 between Government of Uttar Pradesh and Center for Development of Advance Computing (C-DAC) for DVDMS software.

4.13.1 District Drug warehouse module

District Drug warehouse module has 18 processes³⁶. It was, however, observed that:

- Demand generation module was not available at District Drug Warehouses (DDWs). This resulted in not generating of demand by the DDWs and demands at Headquarters level not being compiled defeating the purpose of bottom-up demand generation. As a result, the demand and subsequent purchase of drugs was not in accordance with the actual need.
- Supplier return desk was not being operated due to which NSQ drugs and near expiry drugs could not be monitored and returned to the suppliers.

UPMSCL stated (July 2022) that the above would be implemented as per requirement of UPMSCL.

4.13.2 Finance module

As per MoU of DVDMS, the finance module is provided for the management of finance through online mode with six processes³⁷. Further, Gap Analysis Document³⁸ recommended that this module will benefit the user, such as:

- Budget allocation details will be captured automatically.
- Budget limit will be defined in this module to monitor the budget.
- All the expenditure and transaction will be automatically monitored.
- Modifications in budget for all districts through Headquarters, if required.

Audit observed that UPMSCL failed to utilise this module as finances were being controlled through offline mode. Due to adoption of offline process for financial management, data relating to finances in the DVDMS were different from the offline statement provided to audit. Thus, the very purpose of monitoring of finances in a proper way was defeated.

UPMSCL stated (July 2022) that the above would be implemented in future.

4.13.3 Procurement module

As per MoU of DVDMS, procurement module has six processes.³⁹ Audit observed that process of demand compilation was not implemented as demand of the various health care facilities was only available at drugs warehouse, due to which indent made by the health care facilities to the warehouses could not be compiled in the system software for submission to UPMSCL through DVDMS. It was also observed that in all the test-checked health care facilities, the supply status of the medicine was much below the demand. This indicates

³⁶ Demand Generation, Challan process, Drug inventory view, Issue desk and acknowledge desk, Local purchase, Drug transfer, Third party issue/Receive of drugs, Miscellaneous consumption, Supplier return desk, Cost estimation calculator, Donated items details, Supplier performance, Drug locator, Breakage/lost item details, Physical stock verification, Condemnation of expired items, Help desk, and Reports and others.

³⁷ Supplier registration and rate contract, Drug inventory view, Budget allocation, Supplier performance and payment and all process, help desk, reports and others.

³⁸ Gap analysis document prepared by C-DAC (December-2016) deals with the supply chain processes and describes how each process would be managed through DVDMS system.

³⁹ Suppliers registration and rate contract, Demand compilation, Purchase order generation desk, Drug inventory view, Help desk and Reports and others.

that due to not implementing this process, the procurement was being made on unrealistic data.

UPMSCL stated (July 2022) that the audit observation have been noted for future compliance.

4.13.4 Sub-store and drug distribution centre module

As per MoU of DVDMS, Sub-store and drug distribution centre module consists of 15 processes⁴⁰.

Audit observed that all the test-checked health care facilities were using this module for the purpose of indenting only. All other modules were not being used by them, resultantly, details of breakage/ lost items, report of physical verification of stock, etc., were not available in the system.

UPMSCL stated (July 2022) that instruction would be issued in this regard and it would be informed to DGMH user facilities.

4.13.5 Logistics module

As per MoU of DVDMS, there were six processes⁴¹ under Logistic module. Further, WHO has defined the terms Shelf life⁴², remaining shelf life⁴³ and Upon delivery⁴⁴ in its guidelines.

It was observed that in the module, the supply of drugs by the vendors is accepted only after going through challan process and as per the drug procurement policy, the check for monitoring shelf life applied in this process, is based on date of despatch. Meaning thereby, shelf life of drug is considered from the date of despatch, though it should be based on the date the medical product was delivered at the point, i.e., warehouse of UPMSCL or at the health care facilities. Due to lack of this in system software, audit observed that drugs amounting to ₹ 49.08 crore were procured with less than prescribed shelf life which also led to expiration of drugs as discussed in **Paragraph 4.8**.

UPMSCL stated (July 2022) that the process would be implemented immediately.

4.13.6 Implementation of DVDMS up to end user level

As per DVDMS user manual, Issue Management has been defined as ‘when the drugs are issued to the patients by the prescription of doctor, the entry will be made in the format given for this purpose. Patient’s details are entered and also how much quantity of drugs issued, will also be updated on the portal and after that issue voucher will be generated’. However, audit observed that UPMSCL did not adopt the system which resulted in the distribution of drugs at the end

⁴⁰ Indent desk, Issue desk and acknowledge desk, Drug transfer, local purchase, Third party issue/Receive of drugs, Miscellaneous consumption, Supplier return desk, Cost estimation calculator, Donated items details, Supplier performance, Drug locator, Breakage/lost item details, Physical stock verification, Condemnation of expired items, Help desk and Reports and others

⁴¹ Challan process, Drug inventory view, Drug transfer, Budget allocation, Help desk and Reports and others.

⁴² Shelf life is the period of time, from the date of manufacture, that a product is expected to remain within its approved product specification while handled and stored under defined conditions.

⁴³ Defined as the period remaining, from the date upon delivery, to the expiry date, retest date, install by date or other use before date established by the supplier.

⁴⁴ Means the date the medical product is delivered as specified, e.g. at the port; at the point in country after customs clearance, or at the end-user - and as defined in the agreement between relevant parties.

user level (patients) through offline mode and the same could not be monitored by the UPMSCL.

UPMSCL stated (July 2022) that the audit observation has been noted for compliance. However, in its reply (February 2023), the State Government did not offer comment on the audit observation on DVDMS.

The Government's reply on inadequate implementation of DVDMS was awaited (August 2024) despite reminders.

4.14 Grievances redressal mechanism in UPMSCL

Grievance redressal mechanism is part and parcel of the machinery of any administration. No administration can claim to be accountable, responsive and user-friendly unless it has established an efficient and effective grievance redress mechanism. In fact, the grievance redress mechanism of an organisation is the gauge to measure its efficiency and effectiveness as it provides important feedback on the working of the administration.

In the 10th Board Meeting held on 1st March 2021, the Board of Directors accorded approval for the formation of Grievances Redressal Committee⁴⁵ (GRC) in the UPMSCL with a view to provide platform to all the bidders/firms/stakeholders of the UPMSCL who want to make any representation/complaint against any issue related to their technical scrutiny of the bids or on other matters.

Audit observed that, after the establishment of GRC, eight applications were received up to March 2022. Of which, three applications were considered for the removal of grievances and only two applications were disposed off and remaining one was pending even after 174 days as of March 2022 against the norm of 15 days. Further, it was also observed that UPMSCL levied fee of ₹ 100 to be provided through demand draft to UPMSCL by the complainant. However, due to not submitting of appropriate fees with the grievance, the rest of the five applications were cancelled by the UPMSCL. Thus, instead of redressal of grievances, UPMSCL cancelled the five grievance applications for want of fees. The receipt of only eight applications also shows that wide publicity of grievance redressal system in the UPMSCL was not made.

The Government's reply was awaited (August 2024) despite reminders.

4.15 Availability of equipment in public health

4.15.1 Procurement and Management of equipment

Medical equipment is used in many diverse settings, for prevention and screening in medical care. Audit observed various issues with the centralised procurement and availability of equipment in the test-checked hospitals as discussed in the succeeding paragraphs:

⁴⁵ Prior to this the grievances received in the UPMSCL were disposed of by the concerned section/ competent authority.

4.15.1.1 Essential Equipment List

Uttar Pradesh Medical Supplies Corporation Limited (UPMSCL) was established in October 2017 for centralised procurements and supplies of drugs, consumables and equipment. According to the Procurement Policy of UPMSCL for Equipment and Accessories, UPMSCL was to prepare and circulate the Essential Equipment List (EEL). It was also mandated to float tenders to up-keep active rate contract or quantity contract which can be converted into rate contract up to a limit for all items listed in Essential Equipment List of the State as per the updated specification approved by Technical Specification Committee of UPMSCL. After finalisation of rate contract, UPMSCL was to send the list of equipment with details of make and model, rate and product catalogue to DGMH/DGMET/MD, NHM and other directorates to confirm their requirement⁴⁶. List of items under active rate contract along with all relevant details was also to be updated on UPMSCL's website for reference by user institutes/directorates. EEL was to be updated periodically at least once in two years.

Audit, however, observed that as of March 2022, UPMSCL failed to prepare EEL as envisaged in the procurement policy. Thus, the preparation and circulation of EEL to finalise the rate contract for the DGMH/DGMET/MDNHM and other directorates to meet their requirement remained unaddressed.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.2 Management of demands and supplies of equipment through offline mode

UPMSCL has been mandated with the centralized transparent procurement and distribution of drugs, equipment and consumables. It was, however, observed that online system for management of demand and supplies of equipment was not developed and it was managed through offline mode unlike in case of drugs which was managed through DVDMS software.

The State Government (MHFW) stated (February 2023) that for obtaining online demands of equipment and their monitoring, Equipment Maintenance & Manager System (EMMS) software was being purchased by the UPMSCL. At present, GeM portal (online) was being used for tendering.

4.15.1.3 Procurement of equipment

Audit scrutiny of selected six tenders⁴⁷ (highest PO values), out of 52 tenders floated by UPMSCL as of March 2022 and covering 51 per cent of the purchase order value (₹ 114.85 crore out of ₹ 225.88 crore) disclosed irregularities which have been discussed in the succeeding paragraphs:

4.15.1.4 Wide publicity for NIT

As per the equipment procurement policy of UPMSCL, in addition to website publications, an abridged version of Notice Inviting Tender (NIT) shall also be

⁴⁶ Based on budget, availability of manpower, site readiness and consent on rate.

⁴⁷ UPMSCL/EQ/RC/45; UPMSCL/EQ/RC/11/2018; UPMSCL/EQ/RC/75/re-tender; UPMSCL/EQ/RC/232; UPMSCL/EQ/RC/338; UPMSCL/EQ/RC/78/re-tender-03.

published in at least one Hindi (local & metro cities) and one English (local & metro cities) well known newspapers having wide circulation so that the information reaches prospective suppliers.

Scrutiny of records of six test-checked tenders, however, revealed that the documents/records related to publication in one Hindi and English newspaper for wider publicity were not found on record. Resultantly, wider publicity of the tenders through newspapers could not be ascertained in audit.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.5 Earnest Money Deposit

As per equipment procurement policy of UPMSCL, Earnest Money Deposit (EMD) acts as a safe guard against bidder's withdrawing/altering its bid during the bid validity period. EMD shall only be asked in case of open tender. Submission of EMD shall be mandatory unless exempted in accordance with UP Procurement Manual (Procurement of Goods), 2016. The amount of EMD should be two *per cent* of the estimated value of goods to be purchased. EMD should be incorporated as a fixed amount for each of the Schedule of the Requirement not as a percentage of the estimated value of goods to be purchased. Further, EMD of unsuccessful bidders should be returned to them without any interest whatsoever, after expiry of the final bid validity and latest on or before the 30th day after the award of the contract.

Audit observed that in one (UPMSCL/EQ/RC/338) out of six test-checked tenders, UPMSCL decided the amount of EMD as per the policy. In another tender (UPMSCL/EQ/RC/11/2018) against the required EMD of ₹ 37.50 lakh in view of two *per cent* of estimate cost (₹ 18.75 crore), only ₹ 18.00 lakh was got deposited as EMD by the UPMSCL which resulted in short deposit of EMD of ₹ 19.50 lakh. Further, in remaining three test checked tenders⁴⁸, the basis on which the amount of EMD decided was not available in the records of UPMSCL.

Further, in two⁴⁹ out of six test checked tenders, EMD was returned after the delay of 46 days and 180 days to the unsuccessful bidders in contravention of the policy. In one case (UPMSCL/EQ/RC/232), due to incomplete documentation, it could not be verified in audit whether EMD was returned to the bidder.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.6 Non-production of documents to audit

As per bid document, bidders were required to submit a notarised affidavit duly containing declaration of their non-conviction of any offence by any court of law in India and that bidder was not blacklisted/ debarred from participating in tenders of similar nature anywhere in India, etc. However, the same was not provided to audit in four out of six test checked tenders⁵⁰, due to which cases, if any, against the bidders could not be verified.

⁴⁸ UPMSCL/EQ/RC/45, UPMSCL/EQ/RC/75/re-tender and UPMSCL/EQ/RC/78/re-tender-03. Related records of tender no. 232 was not provided to Audit.

⁴⁹ Related record not provided in Tender no. 11 and 75.

⁵⁰ Documents provided in Tender No. 11 and 338.

Further, as per bid document, bidders should enclose essential quality certificate, such as IEC, ISO-9001, 14001, OHSAS-18001, USFDA, European CE for hospital furniture and various quality certificates such as IEC, ISO-9001, 14001, OHSAS-18001, ISO-50001, BIFMA, Assured green business certificate/ Green guard, ESIC certificate and EPF certificate for office furniture wherever applicable.

However, the same was not provided to Audit in four out of six test checked tenders⁵¹. In absence of the same it could not be verified, whether the firms had valid essential quality certificates.

Moreover, in four out of six test checked tenders, documentary evidences in support of turnover of the firms in last three consecutive years as required in the bid document, was not provided to audit, though asked for. Resultantly, the authenticity of the selected bidders with regards to turnover of the firms could not be verified.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.7 Inordinate delays in execution of agreement

In case of urgent requirement or re-tender, short term tenders giving seven days' time can be floated.

Audit observed that in one (UPMSCL/EQ/RC/78/re-tender-03) out of six test-checked tenders, 11 days were provided for submission of bid. However, it was observed that the tender was finalised in 400 days⁵². Thus, time taken in the execution of contract did not justify the floating of short term tender.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.8 Issuance of purchase order before execution of agreement

Equipment procurement policy stipulates that before placing purchase order, a written agreement should be executed with the identified supplier. Audit, however, observed cases where this condition was not followed by UPMSCL as detailed in **Table 4.33**.

Table 4.33: Issuance of purchase order before execution of agreement

Sl. No.	Particulars	Name of firm (M/s)	Date of PO	Date of Agreement	Value of PO issued (in ₹)
1	Tender No. 45	United surgical industries	23-01-2019	27-05-2019	84424244.00
2	Tender No. 45	Medimek Industries	23-01-2019	29-01-2019	3156358.00
3	Tender No. 45	Samar Steel	23-01-2019	22-05-2019	147320800.00
4	Tender No. 45	Midmark India Pvt Ltd	23-01-2019	05-03-2019	11544360.00
5	Tender No. 75/ Retender	Medisense Electronics	10-05-2019	14-06-2019	12776384.00
6	Tender No. 75/ Retender	Pee Vee Enterprises	06-06-2019	10-06-2019	67371136.00
7	Tender No. 75/ Retender	Swastik Traders	06-06-2019 and 13-06-2019	14-06-2019	10922891.20
8	Tender No. 75/ Retender	Medilux	14-11-2019	16-11-2019	132396.00
	Total				337648569.20 Say ₹ 33.76 crore

(Source: UPMSCL)

⁵¹ Documents provided in Tender No. 11 and 338.

⁵² Last date of Submission of Tender-17 June 2019 and Date of issuance of first LOA 21 July 2020.

Table 4.33 shows that in contravention to the policy, in two (tender no. 45 and 75) out of six test-checked tenders, POs amounting to ₹ 33.76 crore to eight firms were issued for the procurements of equipment by one to 124 days prior to the execution of agreements. This was not only against the policy but it made the contract management of UPMSCCL opaque.

The Government's reply was awaited (August 2024) despite reminders.

4.15.1.9 Short deposit of performance security

Equipment procurement policy stipulates that the performance security shall be solicited from all successful bidders at the rate of five *per cent* of the value of the goods purchased as stated in the bid document.

However, audit observed that in two⁵³ out of six test-checked tenders, against the required performance security of ₹ 163.38 lakh, only ₹ 127.10 lakh was deposited by the firms leading to short deposit of ₹ 36.27 lakh which was against the terms and conditions of the procurement policy.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2 Availability of equipment

Audit analysed the availability of equipment at the time of test-check (during August 2021 to July 2022) in sampled two GMCs, 16 DHs, 19 CHCs and 38 PHCs hospitals. For the purpose, equipment were taken from IPHS and State Government norms for various services as IPD, OT, ICU, Radiological, pathological and labour as discussed in succeeding paragraphs.

4.15.2.1 IPD equipment

Status of the availability of IPD equipment in test-checked GMCs is given in **Table 4.34**.

Table 4.34: Availability of IPD equipment in test-checked GMCs

Name of department test-checked	Type of equipment identified in Audit	Type of equipment available	Shortfall in percentage	Type of equipment identified in Audit		Shortfall in percentage
				Type of equipment available		
			GMC Ambedkar Nagar		GMC, Meerut	
General Medicine	09	07	22	09	07	22
Paediatrics	08	07	13	08	07	13
Surgery	07	06	14	07	07	00
Obstetrics & Gynaecology	05	05	00	05	04	20
Orthopaedics	05	04	20	05	05	00

(Source: Test-checked GMCs)

Table 4.34 shows that in GMC, Ambedkar Nagar, there was shortfall of IPD equipment in four departments whereas in GMC, Meerut, shortfall was observed in three out of five selected departments. The department wise shortfall of equipment in both GMCs ranged between 13 and 22 *per cent*.

Status of the availability of IPD equipment in test-checked DHs and CHCs is given in **Table 4.35** with details in **Appendix 4.6**.

⁵³ Tender no. 45 and 78-Retender

Table 4.35: Availability of IPD equipment in test-checked DHs and CHCs

Hospital/ name of district	Number of hospitals	IPD Equipment	
		Type of equipment identified in Audit	Type of equipment available (<i>per cent</i>)
DHs			
DWHs	5 ⁵⁴	13	10-12 (77-92)
DHMs	6 ⁵⁵	13	7-13 (54-100)
CDHs	2	13	7-10 (54-77)
CHCs			
Ghazipur	2	11	6-8 (55-73)
Kushinagar	2	11	6-8 (55-73)
Hamirpur	2	11	7-9 (64-82)
Jalaun	2	11	8-10 (73-91)
Kanpur Nagar	2	11	9 (82)
Kannauj	1 ⁵⁶	11	4 (36)
Lucknow	3	11	5-6 (45-55)
Saharanpur	2	11	8 (73)
Unnao	2	11	10 (91)

(Source: Test-checked DHs & CHCs)

At DHs level, minimum availability of equipment was observed in two DHs (DHM Saharanpur and CDH Kushinagar) where the availability was only 54 *per cent*. Maximum availability was noticed in DHM, Kanpur Nagar where 13 (100 *per cent*), out of 13 equipment were available.

Test-checked CHCs were also facing shortages of equipment. Minimum number of equipment (36 *per cent*) was observed in CHC, Chhibramau in Kannauj whereas maximum number of equipment (88 *per cent*) was recorded in CHC, Jalaun and CHC Achalganj and Nawabganj in Unnao. Overall availability of equipment in CHCs was ranging between 36 and 91 *per cent*.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.2 OT equipment

The status of availability of OT equipment in test-checked GMCs are given in **Table 4.36**.

Table 4.36: Availability of OT equipment in test-checked GMCs

Name of department	Type of equipment identified in Audit	Type of equipment available	Shortfall in percentage	Type of equipment identified in Audit	Type of equipment available	Shortfall in percentage
	GMC Ambedkar Nagar			GMC, Meerut		
Major OT- Obstetrics & Gynaecology	06	05	17	06	06	00
Major OT- Surgery	07	04	43	07	04	43

(Source: Test-checked GMCs)

Being referral tertiary level hospitals, the unavailability of equipment in Surgery department of both the GMCs were alarming. The surgery OTs in both GMCs were running without 43 *per cent* equipment whereas major OT of Obstetrics

⁵⁴ DWH in Ghazipur has been converted into Medical College and in case of DWH Unnao, data was not made available.

⁵⁵ DHM in Ghazipur has been converted into Medical College.

⁵⁶ CHC-Talgram did not provide information.

and Gynaecology in GMC, Ambedkar Nagar had unavailability of one⁵⁷ out of six test-checked equipment.

The availability of equipment in OTs at DHs and CHCs was as shown in **Table 4.37** with details in **Appendix 4.7**.

Table 4.37: Availability of OT equipment in test-checked DHs and CHCs

Hospital/ name of district	Number of hospitals	OT Equipment	
		Type of equipment ⁵⁸	Equipment available between (<i>per cent</i>)
DHs			
DWHs	6 ⁵⁹	17	8-11 (47-65)
DHMs	6 ⁶⁰	17	7-16 (41-94)
CDHs	2	17	8-10 (47-59)
CHCs			
Ghazipur	2	51	12-18 (24-35)
Kushinagar	1 ⁶¹	51	29 (57)
Hamirpur	2	51	15-49 (29-96)
Jalaun	2	51	30-40 (59-78)
Kanpur Nagar	2	51	36-39 (71-76)
Kannauj	2	51	19-25 (37-49)
Lucknow	3	51	25-38 (49-75)
Saharanpur	2	51	23-36 (45-71)
Unnao	2	51	34-34 (67-67)

(Source: Test-checked DHs and CHCs)

The minimum availability of OT equipment in test-checked DHs was observed in DHM, Kanpur Nagar and DHM, Unnao (41 *per cent*) whereas maximum availability of 94 *per cent* was found in DHM, Jalaun. The major OT equipment like pediatric operation table was available in only one hospital (DHM, Kanpur Nagar) and orthopedic operation table was available in seven (50 *per cent*) out of 14 DHs.

Against 51 equipment for CHC, the maximum availability of equipment was 96 *per cent* in CHC, Muskara in Hamirpur whereas minimum availability of 24 *per cent* equipment was observed in district Ghazipur at CHC, Saidpur. Therefore, there were wide gaps in the availability of equipment in various CHCs. As such, vital equipment were not available in the test-checked DHs and CHCs.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.3 ICU equipment

The status of availability of ICU equipment in test-checked GMCs is given in **Table 4.38**.

⁵⁷ Resectoscope

⁵⁸ Type of equipment as per IPHS norms for DHs and as per State Government norms for CHCs.

⁵⁹ DWH in Ghazipur has been converted into GMC.

⁶⁰ DHM in Ghazipur has been converted into GMC.

⁶¹ OT was not available in CHC Hata, Kushinagar.

Table 4.38: Availability of ICU equipment in test-checked GMCs

Name of ICU	Type of equipment identified	Type of available equipment	Shortfall in percentage	Type of equipment identified	Type of available equipment	Shortfall in percentage
	GMC, Ambedkar Nagar			GMC, Meerut		
Pediatrics	07	06	14 ⁶²	07	06	14 ⁶³
Medical	07	06	14 ⁶⁴	07	06	14 ⁶⁵

(Source: Test-checked GMCs)

In test-checked GMCs, there were shortfalls of 14 *per cent* in Pediatrics ICU and Medical ICU.

Further, out of 16 test-checked DHs, two DHs in Ghazipur were converted to GMC. In remaining 14 DHs, ICU was required to be available in 10 DHs⁶⁶. Out of these 10 DHs, ICU was available in four⁶⁷ DHs though it was functional only in three DHMs with shortfall of equipment ranging between 20 and 50 *per cent*. In DHM Jalaun, ICU was available but was not functional. The details are given in *Appendix 4.8*.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.4 Equipment for labour room

The status of the availability of labour room equipment in test-checked DWHs/CDHs and CHCs is given in **Table 4.39** with details in *Appendix 4.9*.

Table 4.39: Availability of labour room equipment in DHs and CHCs

Hospital/ name of district	Number of hospitals	Labour room Equipment	
		Type of equipment ⁶⁸	Equipment available between (<i>per cent</i>)
DHs			
DWHs	6 ⁶⁹	28	10-17 (36-61)
CDHs	2	28	14-16 (50-57)
CHCs			
Ghazipur	2	18	13-15 (72-83)
Kushinagar	2	18	13-14 (72-78)
Hamirpur	2	18	11-12 (61-67)
Jalaun	2	18	15-18 (83-100)
Kanpur Nagar	2	18	13-18 (72-100)
Kannauj	2	18	13-14 (72-78)
Lucknow	3	18	14-15 (78-83)
Saharanpur	2	18	14-18 (78-100)
Unnao	2	18	14-18 (78-100)

(Source: Test-checked DHs and CHCs)

The availability of labour room equipment in DWHs was ranging between 36 *per cent* (DWH, Jalaun) and 61 *per cent* (DWH, Hamirpur and Virangana Avanti Bai Women Hospital, Lucknow) while in CDHs it was ranging between 50 *per cent* (CDH, Kannauj) and 57 *per cent* (CDH, Kushinagar). However, the

⁶² Defibrillator was not available.

⁶³ Infusion pump was not available.

⁶⁴ Anesthesia work station was not available.

⁶⁵ Ultrasonic machine was not available.

⁶⁶ In DHM and DWH Hamirpur, DWH Jalaun and Unnao, ICU was not required as per IPHS norms.

⁶⁷ DHM Jalaun, Kanpur Nagar, Lucknow and Saharanpur.

⁶⁸ Type of equipment as per IPHS norms for DHs and as per State Government norms for CHCs.

⁶⁹ DWH, Ghazipur has been converted into GMC.

overall availability of these equipment was better in CHCs where the availability was ranging between 61 *per cent* and 100 *per cent*.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.5 Laboratory equipment

In order to provide free diagnostic services by strengthening of departmental laboratories established at CHCs, DGMH conducted a gap analysis of available laboratory equipment in CHCs on the basis of expert committee recommendation and reported (December 2019) shortfall of equipment which was as given in **Table 4.40**.

Table 4.40: Availability of laboratory equipment in CHCs

Sl. No.	Name of equipment	Required quantity for each CHCs	Required quantity for 821 CHC	Available quantity in 821 CHCs	Proposed procurement for 821 CHCs	Shortfall in availability of equipment (<i>per cent</i>)
1	Automated HB analyser with direct finger prick capillary & CBC, Hb estimation	1	821	370	451	55
2	Urine analyser	1	821	51	770	94
3	Electrolyte analyser	1	821	36	785	96
4	Coagulator	1	821	94	727	89
5	Semi auto analyser	1	821	460	361	44
6	ESR analyser	1	821	51	770	94
7	Other accessories					
7.1	Centrifuge	3	2463	810	1653	67
7.2	Water bath	1	821	403	418	51
7.3	Incubator	2	1642	392	1250	76
7.4	Microscope	1	821	949	118	0
7.5	UPS	2	1642	262	1380	84
7.6	Freezer	1	821	397	424	52
	Total		13136	4275	9107	69

(Source: DGMH)

Table 4.40 shows that there was an overall shortage of 69 *per cent* equipment in CHC laboratories as of December 2019. Further, only microscopes were available as per requirements in CHCs whereas unavailability of remaining equipment was ranging between 44 *per cent* and 96 *per cent* with major shortfall of electrolyte analyser (96 *per cent*) followed by urine analyser and ESR analyser at 94 *per cent* each.

Scrutiny of records of the test-checked CHCs revealed unavailability of major equipment as detailed in **Table 4.41**.

Table 4.41: Availability of laboratory equipment in test-checked CHCs

Sl. no.	Name of equipment	Norms as per State Government	Required quantity in test-checked CHCs	Available quantity in test-checked CHCs	Unavailability of equipment in CHCs	Functional equipment	Non-functional equipment
1	Automated HB analyser with direct finger prick capillary & CBC, Hb estimation	1	19	14	5	13	1
2	Urine analyser	1	19	15	4	13	2
3	Electrolyte analyser	1	19	17	2	16	1
4	Coagulator	1	19	6	13	5	1
5	Semi auto analyser	1	19	16	3	14	2
6	ESR analyser	1	19	13	6	13	0
	Total	6	114	81	33	74	7

(Source: Test-checked CHCs)

It is evident from **Table 4.41** that against the required number of 114 equipment in 19 test-checked CHCs, only 81 (71 per cent) lab equipment were available. However, against the total availability of 81 equipment, seven equipment were not functional. Major shortfall was noticed under coagulator (13 CHCs) followed by ESR analyser (six CHCs), thereby, affecting pathological tests in CHCs.

Further, the status of availability of lab equipment in DHs is given below with details in **Appendix 4.10** and summarized in **Table 4.42**.

Table 4.42: Availability of laboratory equipment in test-checked DHs

Types of Hospitals	Number of hospitals	Laboratory equipment	
		Types of equipment as per IPHS (DHs)	Equipment available between (per cent)
DWHs	6 ⁷⁰	50	11-24 (22-48)
DHMs	6 ⁷¹	50	15-34 (30-68)
CDHs	2	50	26-27 (52-54)

(Source: Test-checked DHs)

None of the test-checked DHs had all the equipment in laboratories for the pathological tests to be performed as per the advice of the treating doctors. Minimum equipment were available in DWH, Saharanpur (22 per cent) while DHM, Jalaun had the maximum number of equipment (68 per cent).

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.6 Radiology equipment

Radiology is a major tool for disease management for the detection, staging and treatment of diseases.

⁷⁰ DWH in Ghazipur has been converted into GMC.

⁷¹ DHM in Ghazipur has been converted into GMC.

Records of GMC, Meerut revealed that there was shortage of 32⁷² per cent radiological equipment as against 22 prescribed⁷³ equipment of eight types, only fifteen of six types were available. In GMC, Ambedkar Nagar, there was a shortage of 23⁷⁴ per cent prescribed radiological equipment. Audit noticed that 1,33,296 radiological tests were conducted by the technician (Digital X-ray: 36,189, Manual X-ray: 83,517, USG: 11,745 and CT scan: 1,845) during 2016-17 to January 2022. In absence of radiologist, no report was generated and the respective doctors were examining X-ray films available on console.

Case study: Misutilisation of MRI machine

In GMC, Meerut, 517 cash receipts (₹ 2,000 per MRI scanning) were issued between January 2020 and March 2021. It was, however, observed that against these 517 cash receipts, 738 MRI scans (221 excess scans) were performed by the MRI technician. Audit observed that some MRI scans were performed against the cash receipts issued to other patients' for X-Ray imaging, etc. (₹ 28 and ₹ 175). On being pointed out by audit, the Principal, GMC, Meerut constituted (April 2022) an enquiry committee for fraudulent MRI scanning by the technicians and others.

The State Government (MET) stated (November 2022) that the matter had been investigated and it was noticed that issue and utilisation were not recorded in the same register which has now been rectified. According to the enquiry report, discrepancies were found in 109 cases. Responsibility was being fixed for recovery of loss (₹ 2.18 lakh) and taking punitive measures against the erring official.

Further, the status of availability of radiological equipment in test-checked DHs and CHCs is given in **Table 4.43** with details in **Appendix 4.11**.

Table 4.43: Availability of radiology equipment in DHs and CHCs

Type of Hospital	Number of hospitals	Radiological Equipment	
		Types of equipment	Equipment available between (per cent)
DHs (as per IPHS)			
DWHs	6 ⁷⁵	4	0-2 (0-50)
DHMs	6 ⁷⁶	4	3-4 (75-100)
CDHs	2	4	3-4 (75-100)
CHCs (as per State Government order)			
Ghazipur	2	6	1-4 (17-67)
Kushinagar	2	6	1-2 (17-33)
Hamirpur	2	6	1-3 (17-50)
Jalaun	2	6	3-5 (50-83)
Kanpur Nagar	2	6	4-4 (67)
Kannauj	2	6	0-5 (0-83)

⁷² X-ray 300MA: 01, X-ray 1000 MA (DR): 01, X-ray 1000 MA : 02, X-ray 60 MA : 01, Mammography : 01, Multimedia screen:01

⁷³ NMC/MCI Standard as informed by GMC Ambedkar Nagar {X ray machine 300 MA: 02, X-ray 500 MA: 02, X-ray 1000 MA (DR) : 01, X-ray 1000 MA : 01, X ray 60 MA : 03, X ray 100 MA: 03, USG with CD : 04,CT (64 slice) : 01, Mammography : 01, MRI : 01, C R System : 02, Multimedia projector screen : 01 }.

⁷⁴ Seventeen available against twenty-two.

⁷⁵ DWH, Ghazipur has been converted into GMC.

⁷⁶ DHM, Ghazipur has been converted into GMC.

Type of Hospital	Number of hospitals	Radiological Equipment	
		Types of equipment	Equipment available between (<i>per cent</i>)
Lucknow	3	6	1-6 (17-100)
Saharanpur	2	6	0-2 (0-33)
Unnao	2	6	1-4 (17-67)

(Source: Test-checked DHs & CHCs)

Table 4.43 shows that DWHs were not adequately equipped with the radiological equipment. In three⁷⁷ test-checked DHs, X-ray machines were not available whereas in DWH, Unnao and CDH, Kannauj, these were lying idle due to unavailability of human resource and being beyond economic repair, respectively. Further, MRI machine (desirable as per IPHS for hospitals with 300 or more beds) was available in DHM, Kanpur Nagar.

In test-checked CHCs, two CHCs (Talgram in Kannauj and Sarsawa in Saharanpur) did not have any radiological equipment while five CHCs had only one radiological equipment, two CHCs had two and three radiological equipment and only one CHC at Lucknow (Chinhat) had all the radiological equipment.

The Government's reply was awaited (August 2024) despite reminders.

4.15.2.7 Availability of equipment in PHCs

Audit further analysed the availability of 37 types of equipment for assessment of service deliveries in the test-checked 38 PHCs, the status of which is given in **Table 4.44** with details in **Appendix 4.12**.

Table 4.44: Availability of equipment in test-checked PHCs

District	Number of PHCs	Type of equipment as per GoUP order	Equipment available between (<i>per cent</i>)
Ghazipur	4	37	2-12 (5-32)
Kushinagar	4	37	4-16 (11-43)
Hamirpur	4	37	8-22 (22-59)
Jalaun	4	37	15-24 (41-65)
Kanpur Nagar	4	37	10-26 (27-70)
Kannauj	4	37	5-20 (14-54)
Lucknow	6	37	9-26 (24-70)
Saharanpur	4	37	12-20 (32-54)
Unnao	4	37	10-22 (27-59)

(Source: Test-checked PHCs)

Availability of equipment in test checked PHCs was ranging from five *per cent* to 70 *per cent*. Audit observed that in 26 PHCs (63 *per cent*), the availability of equipment was below 50 *per cent*, thereby a substantial number of PHCs were inadequately equipped for service delivery.

⁷⁷ DWH, Hamirpur, Jalaun and Saharanpur.

4.15.2.8 Oxygen generation plants

Keeping in view the oxygen demands in the State, oxygen generation plants were received from various sources for installation to ensure uninterrupted supply of piped gas. The status of receipt and installation of these plants as of March 2022 was as given in **Table 4.45**.

Table 4.45: Oxygen generation plants in the State as of March 2022

Sl. No.	Category	Sanctioned	Installed	Under installation	Total	Functional	Pending for commissioning
1	Existing plants	23	23	0	23	23	0
2a	PM cares I plant	14	14	0	14	14	0
2b	PM cares II plant	21	21	0	21	21	0
2c	PM cares III plant	93	93	0	93	93	0
2	PM cares total	128	128	0	128	128	0
3	State funded plants	62	60	2	62	60	0
4	Cane and Excise Department	79	79	0	79	78	1
5	MP/ MLA funds	99	99	0	99	99	0
6	CSR funds	173	171	2	173	171	0
	TOTAL	564	560	4	564	559	1

(Source: Secretariat, MHFW)

It may be seen from **Table 4.45** that 559 oxygen generation plants (99 per cent) were functional as of March 2022. CSR fund was the major contributor with 173 plants (31 per cent) followed by PM cares fund with 128 plants (23 per cent) and MP/ MLA fund with 99 plants (18 per cent). The State Government had funded 62 plants, arriving at a total of 85 with existing 23 plants.

It was further observed that distribution of plants for installation in test-checked districts was not in consonance with beds in the hospitals due to which the supply of piped gas was ranging between one LPM⁷⁸ and 12 LPM per bed (**Appendix 4.13**). Further, all functional oxygen generation plants were to be run for minimum four hours a day. Scrutiny of the records of test-checked districts, however, revealed that in district male hospitals, Unnao, the oxygen generation plant was not running for required four hours most of the time⁷⁹. Further, in Kushinagar, out of four plants, one plant was out of order (December 2021) due to short circuit and remained not functional (May 2022).

The Government's reply was awaited (August 2024) despite reminders.

⁷⁸ Liter per minute

⁷⁹ During 4 December 2021 to 31 January 2022 (59 days) the plant was closed for 23 days. Out of 35 days, on 31 days the plant was made operational between 15 minutes to 3.30 hours.

4.15.3 Idle equipment

Audit observed that:

- In GMC, Ambedkar Nagar, 100 equipment⁸⁰ procured during April 2015 to December 2016 were not fully functional as posts of human resource were not sanctioned by the Government. Due to which, their depreciation was inevitable.
- In GMC, Ambedkar Nagar, a haemodialysis machine valuing ₹ 13.06 lakh was procured (June 2017) for General Medicine department. Audit observed that the machine was lying idle till August 2020 and from December 2021, owing to unavailability of staff and nephrologist. During intervening period (September 2020 to November 2021), only 67 patients were treated by a technician. Thus dialysis, an emergency service that should be available round the clock was not available in the GMC.
- In GMC, Meerut, one Endoscopy machine was not functioning due to lack of faculty.
- In GMC, Meerut, 76 Multimedia Monitor were purchased during June 2020 and November 2021. Of these, 58 monitors costing ₹ 68.73 lakh were lying idle in a store room of Trauma ICU including 33 unboxed monitors.

The State Government (MET) stated (November 2022) that at present, all the machines have been made functional and staff has been trained for operation of haemodialysis machine in GMC, Ambedkar Nagar. It further stated that the proposal for sanction of post of haemodialysis technician was under consideration. In respect of GMC Meerut, MET stated that the department for using endoscopy is not sanctioned in GMC, Meerut. However, HOD of the medicine department has been directed to make endoscopy machine functional by getting interested faculties trained.

The fact remains that a large number of equipment in the GMCs were lying idle defeating the very purpose of procurement of these equipment.

To sum up, the procurement agency (UPMSCL) could not procure the demanded drugs adequately. As such, stock-out of drugs was noticed in test-checked hospitals. There was inadequate supply chain management as drugs even with less than 50 per cent shelf life were accepted and consignment of drugs were sent to warehouses/HCFs without demand. UPMSCL did not inspect the empanelled laboratories and large number of batches of EDL and non-EDL drugs were not tested for ensuring quality of drugs by these laboratories. There were inordinate delays in the furnishing of test reports by the empanelled laboratories. Some NSQ drugs were also distributed to hospitals and patients. Further, many modules of DVDMS software were being not used and therefore, not giving intended result.

Since the medical equipment are used in many diverse settings, for prevention and screening in medical care, their availability in hospitals is required to be maintained. However, in test-checked hospitals, there were shortfalls in

⁸⁰ OT (4); Radiology (2); Orthopedic (12); Dental (3); Physiology (1); Anatomy (1); Psychiatry (25); Medicine (13); TB (3); Pediatrics (4); ENT (10); Gynaecology (2); Emergency (8) and Anesthesia (12).

availability of equipment. Further, demand and supply of equipment was not being monitored through online mode. All these were indicative of poor management in healthcare system.

Recommendations:

State Government should:

- 7. ensure that the procurement agency (UPMSCL) finalises the rate contracts of Essential Drugs in a time bound manner by strictly following the laid down procedure of contract management;*
- 8. ensure that the hospitals keep a close vigil on the availability of essential drugs in their stores to avoid out of pocket expenditure by the patients;*
- 9. fix the responsibility for expiration of drugs in the central warehouse as well as in the district hospitals;*
- 10. ensure availability of consumables in each level of hospital;*
- 11. ensure that DVDMS software is made fully functional for supply chain management of drugs;*
- 12. prepare the list of Essential Equipment and implement online monitoring of demand and supply of equipment in various health care facilities;*
- 13. review the inter-hospital availability of equipment required in government hospitals;*
- 14. ensure training of manpower for operation and maintenance of equipment installed in hospitals;*
- 15. implement the recommendations of the expert committee relating to availability of laboratory equipment in CHCs.*