Chapter 4

Availability of Drugs, Medicines and Equipment in the Healthcare Institutions

Highlights

- During 2016-22, the Department of Health and Family Welfare, GoCG (Department) had procured drugs, medicines and equipment valuing ₹ 3,753.18 crore. The GoCG had established (2010) Chhattisgarh State Medical Services Corporation Limited (CGMSCL) as a centralised nodal agency for all procurement and supply of drugs, medicines and equipment under the Health Department.
- The Annual Indents (AI) for procurement of drugs, medicines and consumables were finalised by the Directorates of Health Department with delay and in *ad hoc* manner without considering previous consumption, existing stocks and purchase orders already placed. Moreover, programme/scheme drugs were not included in the AI. Further, local purchases were not entered in Drug Procurement and Distribution Management Information System (DPDMIS) by Healthcare Institutions (HIs).
- Despite having centralised procurement agency, 26.79 to 50.65 *per cent* of total drugs, medicines and consumables procured during 2016-22 were purchased locally (decentralised procurement).
- CGMSCL failed to prepare/finalise the purchase manual for standardising purchase process in consonance with the Chhattisgarh Stores Purchase Rules (CGSPR) due to which in many cases, purchases were made in violation of CGSPR. There was delay ranging from three to 649 days in finalisation of 165 tenders out of total 278 tenders called for finalising Rate Contracts (RCs) for procurement of drugs, medicines and equipment during 2016-22. As a result, there were instances of delay in supply of drugs resulting in non-availability of drugs as per essential drugs list (EDL) in the HIs and consequent local purchases or purchase of essential drugs by the patients on their own cost.
- The validity period of new RCs for procurement of equipment and drugs was extended by the CGMSCL from one year to two years and from one year to 18 months respectively thereby extending the validity period by six months without the approval of Competent Authority.
- CGMSCL did not finalise the RC for all indented drugs and the percentage of drugs for which RC was not finalised against the indented quantity during 2016-22 ranged between 48.82 (2016-2017) and 63.59 (2018-2019) per cent. Consequently, HIs had to purchase the untested EDL drugs valuing ₹ 97.93 crore through local purchase during 2017-22.

- CGMSCL had executed the long-term RCs for all the equipment indented by the HIs without considering the category of equipment viz., high value, occasionally required etc., which was not in the best interest of the Government because some equipment is demanded by the HIs occasionally and due to frequent upgradation in technology, the equipment may not be available at current market rate.
- ➤ There were serious lapses in tender evaluation system of CGMSCL for procurement of equipment as it did not consider the price of reagents required for testing with the equipment and evaluated only cost of testing equipment which resulted in purchase of reagents costing ₹ 129.27 crore without inviting tenders and considering them as proprietary item at the rates quoted by the supplier.
- In four cases, the technical specifications of equipment were fixed by DHS/CGMSCL without due diligence and in collusion with the suppliers which resulted in fixation of tailor-made specifications and irregular procurement of ₹ 30.48 crore.
- ➤ The CGMSCL had finalised RCs for procurement of equipment in three cases without proper assessment of reasonability of quoted rates which led to avoidable extra expenditure of ₹ 3.26 crore.
- ➤ The Health Department had procured Biosafety Cabinet, Calorimeter and Micro pipette more than the requirement, which has resulted in unwarranted procurement of ₹ 23.09 crore leading to idling of equipment.
- ➤ CGMSCL procured PET-CT machine in PPP mode for Medical College Hospital, Raipur without finalisation of modalities for operating the machine resulting in idling of equipment and infrastructure worth ₹ 18.46 crore besides deprival of facility to general public till date (November 2022).
- A total of 21 medical equipment valuing ₹ 8.13 crore were kept idle in HIs due to various reasons i.e., technical fault, non-availability of vital parts, non-supply of reagents/kits, non-construction of necessary infrastructure, non-providing the training to staff etc., in GMC/GMCH Raipur, Jagdalpur and Rajnandgaon
- The CGMSCL had purchased drugs, medicines and consumables at higher rates due to lack of monitoring of prevailing market price, by ignoring existing RCs with lower rates and rejection of lower rate on unjustified grounds which resulted in extra expenditure of ₹ 7.35 crore. There were instances of procurement of drugs and medicines at tailor made specifications, invitation of tender with indicative quantity instead of bulk quantity etc. CGMSCL also purchased drugs worth ₹ 23.98 crore from blacklisted firms.
- ➤ CGMSCL mentioned the requirement of Paracetamol and RD Malaria Kit much lower than the actual indent and could not take benefit of bulk purchase and tenders were finalised at higher rate which had resulted in avoidable loss of ₹ 4.09 crore.

- CGMSCL failed to place purchase order for Anti Rabies Vaccine within validity of RC as per the indented quantity despite having demand from the HIs and purchased the same at higher rate on nomination basis, which resulted in avoidable extra expenditure of ₹ 3.20 crore. Further, in subsequent tender, the CGMSCL deviated from the indented variant and opted the variant of higher rate further resulting in avoidable extra expenditure of ₹ 1.95 crore.
- CGMSCL failed to get replacement of 'Not of Standard Quality' drugs from the supplier and did neither levy penalty of ₹ 1.69 crore nor recovered the demurrage charges of ₹ 24.60 lakh from such defaulting suppliers.
- The drugs inventory system was deficient as CGMSCL placed the purchase orders without considering available stock in its warehouses, the previous consumption trend and future requirement resulting in expiry of drugs valuing ₹ 33.63 crore.
- In warehouse management, there were instances of non-compliance with the Drugs and Cosmetics Rules for storage of the drugs. CGMSCL failed to maintain the prescribed temperature at the warehouses for storage of various drugs which resulted in loss of efficacy and quality of drugs. There were no standard operating procedures defined by CGMSCL for warehouse management.
- There were instances of non-availability of drugs at HIs. Out of 272 EDL drugs required for DHs, total 103 drugs were not available, as on 31 March 2022 in seven test checked districts. Similarly, out of 149 EDL drugs required for CHC, total 39 drugs were not available in 14 test checked CHCs.
- For procurement of COVID-19 drugs and equipment, CGMSCL had issued 340 purchase orders for 131 items of equipment worth ₹ 142.73 crore and 385 purchase orders for 84 items of drugs, medicines and consumables worth ₹ 860.03 crore to the suppliers.
- ➤ The COVID Committee had recommended the finalisation of tenders for procurement of COVID-19 related items with the two bidders who did not fulfil the pre-qualification requirement. This resulted in irregular purchases of ₹ 22.98 crore.
- In case of procurement of Truenat combo kit, the COVID Committee recommended to purchase through distributor instead of concessional kit offered by the original manufactures, which resulted in avoidable extra expenditure of ₹ 9.33 crore.
- Due to modification in supply schedule in the tender of Rapid Antigen Detection Test and inclusion of stringent conditions, out of six bidders only one bidder accepted the revised supply conditions and quoted the rate of ₹ 89.60 per kit which was 245 per cent higher in comparison to previous finalised rate. This had resulted in avoidable extra expenditure of ₹ 13.21 crore.
- ➤ Procurement agency (CGMSCL) had procured COVID-19 related items worth ₹ 23.13 crore without recommendation of COVID Committee which was irregular.

- Four Liquid Medical Oxygen (LMO) tanks purchased for GMCHs were either not installed or not connected to the supply line of hospitals and these were lying idle. Further, Cryogenic LMO tank (12KL) fixed in DKSPGI hospital was not connected to the oxygen pipeline of the hospital.
- The Annual Indents of Directorate AYUSH were furnished to the procurement agency (CGMSCL) with a delay ranging from four to 256 days during 2016-22. A total of 281 equipment costing ₹ 0.75 crore were excessively supplied to the AYUSH HIs in the selected districts.
- The IT system was developed with inadequate planning. The modules of the software were partially functional. The different databases used in software were not interconnected.
- The system did not have checks for data authentication and duplicity of records.
- > Drugs were supplied in excess up to 467 *per cent* over and above the annual indent. Expiry of drugs and delay of supply was not monitored in system.
- Barcode system was not implemented and there was no mechanism to capture barcode details in the system.
- Quality Control reports were received with delay ranging from 43 to 265 days.
- Fertiary level drugs were supplied to primary level facilities due to discrepancies in facility management.
- The system did not have a password policy and robust website security policy.

4.1 Introduction

Availability of drugs, medicines and equipment in the Healthcare Institutions (HIs) plays important and crucial role in patient care. The procurement of drugs, medicines and equipment in the State were made through centralised and decentralised (local) purchase. For centralised procurement, GoCG incorporated (2010) the Chhattisgarh State Medical Services Corporation Limited (CGMSCL) as a wholly owned Government Company under the administrative control of Department of Public Health and Family Welfare (Department) which started its business operations from 2013-14. The primary objective of CGMSCL is to ensure supply of drugs, medicines and equipment in HIs throughout the State and get the benefit of bulk purchase through centralised procurement. CGMSCL was required to make procurement of all essential drugs, medicines, consumables and equipment by open competitive bidding process through e-procurement portal following the provisions of Chhattisgarh Stores Purchase Rules, 2002 (CGSPR), as amended.

The decentralised procurement was made by the HIs in the case of non-supply of drugs, medicines and consumables by CGMSCL for their indented items. The HIs also procure non-EDL drugs through decentralised procurement. Total procurement of drugs, medicines, consumables and equipment for HIs during 2016-22 are given in the *Table - 4.1*:

Table - 4.1: Year-wise details of total procurement of drugs and equipment for healthcare facilities

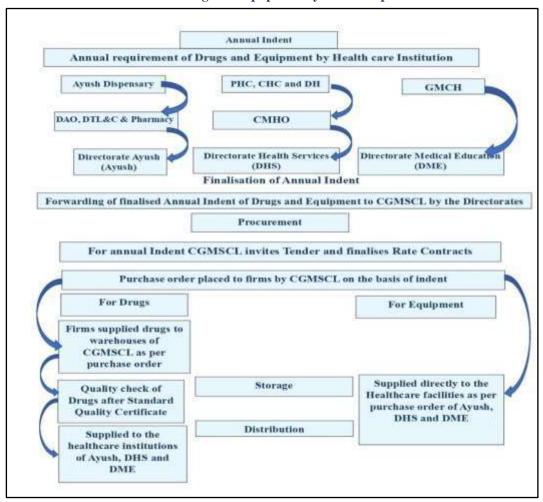
Year	Centralised procurement (₹ in crore) Drugs & Equipment Medicines			d procurement crore)	Total procurement (₹ in crore)		
					Drugs & Medicines	Equipment	
2016-17	112.93	81.47	115.90	6.87	228.83	88.34	
2017-18	170.08	108.06	95.82	38.54	265.90	146.60	
2018-19	145.72	163.94	106.89	5.14	252.61	169.08	
2019-20	179.26	103.62	162.83	6.49	342.09	110.11	
2020-21	589.24	264.97	215.65	25.41	804.89	290.38	
2021-22	528.01 216.43		269.66	40.25	797.67	256.68	
Total	1725.24	938.49	966.75	122.70	2691.99	1061.19	

(Source: VLC database under the detailed head 25-001, 005, 007 and 28-003)

4.2 Centralised Procurement by CGMSCL

The process followed for indent, procurement, storage and distribution of drugs and equipment by Health Department is shown in *Chart - 4.1*:

Chart - 4.1: Chart showing details of process of indent, procurement, storage and distribution of drugs and equipment by Health Department



(Source: Compiled from Information furnished by CGMSCL)

4.2.1 Finalisation of Annual Indents (AI)

During scrutiny of records related to AIs of drugs and medicines received from the DHS/DME/DA, Audit observed the followings:

(i) Delayed finalisation of Annual Indent

The GoCG instructed (27 May 2016) that the estimates of required medicines for all the HIs in the State should be prepared at Directorate level by 30 September every year. After scrutiny of annual estimates of medicines, the respective Directorates should finalise the AI with clear specification and quantity which should be placed to CGMSCL by 31 October of every year.

Audit observed that a State Level Committee (SLC) in DHS finalises the AIs. The SLC meetings were however not conducted in a timely manner for finalisation of indent. The minutes of the meeting were also not available on the records. Audit noticed delay in forwarding of AIs by DHS to CGMSCL ranging between one month and eight months, as detailed in *Table - 4.2*.

In case of DME, field HIs under DME forwarded the indent directly to CGMSCL until March 2020 and thereafter from 2020-21 onwards, DME consolidated the demand of field HIs for onward submission to CGMSCL. There was delay ranging between one month and five months in forwarding the AIs to CGMSCL by the DME, as detailed in *Table - 4.2*.

Table - 4.2: Year wise scheduled date and actual date of submission of AI by DHS and DME

Year	Date of SLC meeting	Due date of submission of indent to CGMSCL	Actual date of submission to CGMSCL	Delay in submission of AIs to CGMSCL	Actual date of submission to CGMSCL	Delay in submission of AIs to CGMSCL
			DH	IS	DM	E
2016-17	30-12-2015	31-10-2015	23-02-2016	04 months		
2017-18	4-12-2016	31-10-2016	28-04-2017	06 months		
2018-19	7-06-2018	31-10-2017	12-07-2018	08 months		
2019-20	23-01-2019	31-10-2018	03-05-2019	06 months		
2020-21	29-11-2019	31-10-2019	04-12-2019	01 month	06-12-2019	01 month
2021-22	5-12-2020	31-10-2020	26-12-2020	02 months	03-04-2021	05 months

(Source: Compiled from information furnished by the DHS and DME)

It was further observed that there were no working papers relating to finalisation of indents at Directorate level. Audit observed that the HI wise indent data for drugs and medicines for the previous years was not available in the back-end data of Drug Procurement and Distribution Management Information System (DPDMIS) portal to assess the pattern of demand by field units and revisions made at the level of district/health directorates.

Audit further observed that while placing the AIs to CGMSCL for next year, the quantities of non-purchased drugs and consumables of the previous years were not taken into consideration. Due to this, the possibilities of purchase of overlapping/excessive quantities could not be ruled out.

The indents forwarded by HIs were revised at District and Directorate level without recording any justification and without analysis of consumption pattern, available stock in units and warehouses of CGMSCL and status of supply against the previous indent.

Due to unscientific approach in finalisation of indents, Audit noticed instances of procurement of drugs and medicines in excess of the requirement. Moreover, expiry of drugs and non-availability/ shortage of drugs in HIs were also noticed during audit which are discussed in subsequent paragraphs in this chapter.

The DHS stated (January 2023) that the AIs for the year 2023-24 were finalised in time. DHS further stated that the process of finalisation of indent includes considering available stock in warehouses and by adding an additional 10 *per cent* over the last year's consumption. The Director assured that in future the minutes of the committee meeting will be documented along with working papers.

(ii) Non-inclusion of non-EDL and programme/ scheme drugs in AIs

Audit observed that while finalising the AIs, the indents for specific programme and scheme drugs viz. *Mitanin* Programme, National Mental Health Programme, Sickle Cell Management Programme, National Communicable Disease Programme were not obtained from HIs and the same were purchased in decentralised manner at local level.

For instance, for the period from 2016-22, DHS did not send the indent to CGMSCL for EDL drugs/consumables required under *Mitanin* Programme even though ₹ 33.33 crore was allocated to CHMOs for purchase of *Mitanin dawa peti*. Subsequently, all these drugs/consumables were purchased by the districts HIs through local purchase.

The DHS stated (January 2023) that the *mitanin* and programme-oriented drugs are included in current AI (2023-24) excluding central supplied schemes as per the Audit recommendations.

(iii) Deficient implementation of DPDMIS

Audit observed that entries of local purchase were not entered in DPDMIS by HIs. On test check in seven districts, it was noticed that 17 HIs procured drugs and consumable worth ₹ 86.93 crore through local purchase by obtaining No objection Certificates (NoC) from the CGMSCL and drugs and consumable worth ₹ 86.37 crore were procured without obtaining NoC. Further, Material Receipt Certificate were not generated in DPDMIS during the period from 2019-22.

4.2.2 Non-implementation of policy for centralised and decentralised procurement

For availing benefit of bulk purchases, the health directorates transfer the funds to the CGMSCL for centralised procurement. Further, to meet the emergency requirement and in case of non-availability of drugs, medicines and equipment at CGMSCL, DHS allocates the fund to districts for decentralised procurement through CMHO/CS. Similarly, in case of DME,

GMCHs and associated hospitals also procured drugs, medicines and consumables through decentralised procurement (local purchases). The Department directed (11 September 2019) all the Directorates to transfer 90 *per cent* of the budget to CGMSCL for centralised procurement. The details of transfer of funds to CGMSCL for centralised purchase and allocation of funds to field HIs for decentralised purchase during 2016-22 is given in *Table - 4.3*:

Table - 4.3: Centralised and decentralised procurement of drugs, medicines and consumables for DHS, DME and AYUSH units

(₹in crore)

Year	Total expenditure on drugs by the Department	Funds transferred to CGMSCL for drug procurement by the Department (Centralised)	Drug Procurements by field Healthcare institutions (De-centralised procurement)	Decentralised procurement (Per cent)
2016-17	228.83	112.93	115.90	50.65
2017-18	265.90	170.08	95.82	36.04
2018-19	252.61	145.72	106.89	42.31
2019-20	342.09	179.26	162.83	47.60
2020-21	804.89	589.24	215.65	26.79
2021-22	797.67	528.01	269.66	33.81
Total	2,691.99	1,725.24	966.75	

(Source: VLC database of AG (A&E); Purchases during 2020-21 & 2021-22 includes COVID purchase also)

As could be seen from the above that expenditure on drugs purchased through decentralised (local purchases) manner increased from ₹ 95.82 crore in 2017-18 to ₹ 269.66 crore in 2021-22. During the period of 2016-22, share of local purchase ranged from 26.79 to 50.65 *per cent* in drugs/consumables. HIs continued to purchase the drugs, medicines and consumables through local purchase despite higher rates and untested drugs. Instances of local purchases at higher rate are tabulated in *Table - 4.4*:

Table - 4.4: Details of medicines purchased locally and L1 rates in centralised purchase

Sl.	Drug name	CGMSCL Rate (₹ per unit)	L1 rate (₹ per unit)	Rate difference (₹ per unit)	Percentage difference	Local supplier	Purchased quantity (nos.)	Date of Supply	Name of HI
1	Inj Corboplatin 150mg	369.00	413.28	44.28	12.00	M/s Chopda enterprises Raipur	176	16-10-2020	GMCH Raipur
2	Betamethasone Val-erate Ointment IP 0.1%	7.39	12.32	4.93	66.71	Hitendra enterprises Raipur	5000	11-07-2018	GMCH Ambikapur
3	Linezolid 2mg/ ml Injection	68.264	110.88	42.616	62.43	Pankaj Medico traders Bilaspur	300	08-07-2019	GMCH Bilaspur
4	Human Anti D Immunoglobulin (Polyclonal/ Monoclonal) Inj BP300mcg	1848.00	2912	1064	57.58	Pankaj Medico traders Bilaspur	100	06-01-2021	GMCH Bilaspur
5	Tab amox+clav 375 mg	3.91	6.16	2.25	57.54	M/s Hindustan	3000	13-08-2020	GMCH Raipur

Sl.	Drug name	CGMSCL Rate (₹ per unit)	L1 rate (₹ per unit)	Rate difference (₹ per unit)	Percentage difference	Local supplier	Purchased quantity (nos.)	Date of Supply	Name of HI
						Medi Traders, Raipur			
6	Inj. gematabine 1.4 gm	513.02	777.84	264.82	51.62	M/s kapish pharma Raipur	192	28-10-2020	GMCH Raipur
7	Oint. povidone iodine	7.03	10.07	3.04	43.24	M/s Suresh medical store	6000	21-08-2019	GMCH Ambikapur
8	Inj. Ceftriaxone Pow der for injection1g IP	12.86	18.20	5.34	41.52	Pankaj Medico traders Bilaspur	5400	15-06-2019	GMCH Bilaspur
9	Enoxaparin Inj. 40mg	155.40	209.00	53.60	34.49	Gurunanak medical	1000	02-03-2022	GMCH Bilaspur
10	Inj. permetriaed 500mg	708.00	928.48	220.48	31.14	Shubham agency	50	29-08-2020	GMCH Raipur

(Source: Compiled from Information furnished by GMCH, Raipur, Ambikapur and Bilaspur)

The above EDL drugs were procured locally by the HIs after obtaining NoC from the DPDMIS indicating that CGMSCL failed to ensure supplies of these indented drugs to HIs in time.

4.2.3 Inordinate delay in preparing purchase manual/rules of doing business

Being a centralised procurement agency, it is essential for CGMSCL to have a comprehensive procurement manual in accordance with the CGSPR so that economic, effective and efficient procurement can be done for the State HIs.

Audit observed that CGMSCL procured the drugs, medicines and equipment without any standardised documented procurement system as no procurement manual/policy has been framed by it since inception. As a result, there was lack of uniformity in procurement procedures adopted by CGMSCL. Audit had noticed instances of procurement which were in deviation to prescribed rules/ norms and are discussed in succeeding paragraphs of this chapter.

Audit further observed that the Board of Directors (BoD) of CGMSCL had accorded (January 2016) approval for a draft procurement manual named as "Principles of doing business" and CGMSCL forwarded (March 2016) the same to the Department for obtaining approval. In response, the Department directed (January 2018) CGMSCL to make some amendments and addition in its proposed draft. Accordingly, MD constituted (15 February 2018) three members¹ committee and directed to submit the revised draft within 10 days. Audit however, observed that even after lapse of about five years, the procurement manual was not prepared.

General Manager (Finance), Incharge General Manager (Technical) and Deputy Manager (Finance)

4.2.4 Irregular extension of the validity of Rate Contracts for procurement of drugs, medicines and equipment in violation of CGSPR

As per CGSPR, the Rate Contracts (RCs) for procurement of materials is generally valid for one year. Accordingly, CGMSCL finalises the RC for validity period of one year. It is the responsibility of CGMSCL to finalise new RC before expiry of validity period of current RC so that continued supply of drugs to HIs can be ensured. For this, it is supposed to act in advance for inviting fresh tender for new RCs. In case of a delay in finalisation of fresh tender, CGMSCL extends the validity of existing RCs for further six months at the same rates, terms and conditions.

Audit observed following shortcomings on validity period of RCs:

(i) RCs for equipment

CGMSCL, w.e.f. August 2016, extended the validity period of its new RCs for procurement of equipment from one year to two years with facility to further extended them for six months. Audit observed that CGMSCL had *suo motu* extended the validity of the RCs for procurement of equipment for the duration from one year to two years in violation of CGSPR without approval of competent authority.

(ii) Rate Contracts for drugs and medicines

Audit observed (March 2021) that CGMSCL in its 30th Board meeting decided (23 February 2019) to extend the validity period of its new RCs for procurement of drugs and medicines from one year to 18 months which could be further extended for six months. The extension of validity period was in violation of CGSPR as it was without the approval of competent authority and hence irregular.

4.2.5 Abnormal delay in finalisation of tenders

The Department had fixed (8 December 2016) time limit of 153 days from the date of NIT for finalisation of RC by CGMSCL in respect of drugs, consumables and equipment. During 2016-22, CGMSCL had finalised 278 tenders for RC of drugs/consumables (156 tenders) and medical equipment (122 tenders).

Audit observed that out of total 278 tenders, 165 tenders (59 *per cent*) were finalised with delay of more than 153 days. Delay in finalization of 74 tenders of drugs/ consumable ranged from four to 494 days and in 91 tenders of equipment it ranged from three to 649 days in, as detailed in *Appendix - 4.1* and *4.2* respectively. Delay in tender encouraged local purchase at higher rates as discussed in next para.

Audit noticed that due to lack of clarity in pre-qualification requirement and technical specifications mentioned in the tender, frequent amendments were made to the tender after notification, which also delayed the finalisation of tenders.

As the user department furnishes the demand for one year, in case of delayed finalisation of tender, the demand becomes irrelevant. Further, some medicines required for specific seasons would not be available to the patients

in due time owing to delay in tender finalisation and if the same are supplied after such specific season, then chances of expiry of such drugs would be higher.

4.2.6 Non-finalisation of RCs for all indented drugs resulted in purchase of drugs through local purchase

CGMSCL invites online tenders for finalisation of RCs for procurement of drugs, medicines and equipment from the registered suppliers according to the AIs of Department. After finalisation of tenders RCs were executed with successful bidders and drugs/ equipment were purchased by placing POs. The details of finalisation of RC against the drugs indented is given in *Table - 4.5*:

Table - 4.5: Year-wise indent of drugs received, and RC finalised for DHS and DME

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
No. of indented drugs by DHS and DME	723	867	997	966	1235	2095
No. of drugs, for which RC finalized	370	343	363	386	421	998
No. of drugs, for which RC not finalized	353	524	634	580	714	1097
Percentage of drugs, for which RC not finalised	48.82	60.44	63.59	60.04	62.91	52.36

(Source: Compiled from Information furnished by the DHS and DME)

As could be seen from the *Table - 4.5* that CGMSCL had failed to finalise the RC for all indented drugs. Percentage of RCs not finalised ranged between 48.82 *per cent* and 63.59 *per cent* of indented drugs during 2016-22. Due to non finalisation of RCs by the CGMSCL against the indent, HIs made purchase of untested essential drugs valuing ₹ 97.93 crore² locally during 2017-22³.

Procurement of equipment

4.2.7 Finalisation of RCs for high value equipment

Rule 4.3.3 of the CGSPR stipulates that all the Government purchases valuing more than ₹ one lakh are to be made through open tendering process. The RCs are to be executed with the suppliers in accordance with the CGSPR for the items which are to be used frequently so that it may be available in very short time. Audit observed that neither CGMSCL nor Department had categorised the medical equipment, which were required frequently and occasionally in HIs. In absence of the same the CGMSCL had executed the long-term RCs⁴ for all the equipment indented by the HIs irrespective of its value whether, it was low value equipment or high value equipment. Some illustrative examples of procurement of medical equipment (value ranging between ₹ 25 lakh and ₹ five crore) by CGMSCL during 2016-21 with RCs of two years are given in *Appendix - 4.3*.

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² As per CGMSCL's DPDMIS online system

³ CGMSCL started to maintain the local purchase data only from April 2017.

^{4 24} months for equipment

Finalisation of RCs for high value equipment is not in the best interest of the Government because it is demanded by the HIs occasionally and due to frequent upgradation in technology, procurement through long term RC may result in purchase of outdated equipment at higher cost.

Therefore, CGMSCL should reconsider its practice of finalisation of RCs for all the medical equipment. For more efficient and effective tendering, CGMSCL may also consider including extension/ repeat order clause⁵ in its tender in line with CGSPR.

The Government assured (December 2022) that in future, quantity tenders will be invited for capital equipment.

4.2.8 Purchase of equipment in excess of the quantity indicated in tender due to non-assessment of actual requirement

Rule 4.14 of CGSPR stipulates that the repeat/ subsequent order would not be more than 25 *per cent* quantity of the original order. Therefore, the total purchased quantity should not exceed more than 25 *per cent* of the tendered quantity. The Schedule of requirement (Annexure – 1 of tender document) indicates the tentative quantity to be purchased, which helps the bidder to quote the most competitive rates for the minimum quantity. Audit observed that during 2016-22 in 173 cases, CGMSCL had procured equipment in higher quantities than the tendered quantities of the items. Some illustrative examples are tabulated in *Table - 4.6:*

Table - 4.6: Details of actual	purchase of	equipment vis-à-vis tend	ered quantity

Sl. No.	Tender Ref. No. and date	Name of Equipment	Tendered quantity (nos.)	Rate (₹ per unit)	Total purchase (nos.)	Excess than the tendered quantity (nos.)
1	53	Baby Weight Machine	1	2,450	19,142	19,141
2	15-06-17	Multi Parameter Monitor	2	1,48,425	357	355
3		Bio Chemical Analyser	2	1,80,000	142	140
4		Microscope	1	2,10,000	70	69
5		Dental Chair	1	1,79,000	65	64
6		B.P. Apparatus/ Sphygmomanometer	11	3,920	694	683
7	77(R) 08-07-18	Emergency resuscitation tray with intubation eqp	3	1,34,400	545	542
8		ICU Beds	3	1,41,600	333	330
9	67(R2) 08-08-18	Instrument Trolley All Stainless Steel	20	13,570	1,491	1,471
10		IV Stand	68	4,129	4,995	4,927

(Source: Compiled from records furnished by CGMSCL)

Large variation in the quantity procured as against the tendered quantity indicates that the requirement was not assessed properly by the DHS/ DME/ AYUSH to avail the benefit of bulk purchase. There may be possibility that

Rule 4.14 of CGSPR stipulates that the extension/repeat order would be placed upto the 25 *per cent* quantity of the original order.

reputed and renowned suppliers may not have participated in the tenders due to fewer quantities mentioned in the tender. As the subsequent requirements were significantly higher than the original indent, CGMSCL should have invited fresh tenders to get most competitive rates. The procurement of the multiple quantity was also against the provisions contained in Rule 4.14 of CGSPR.

Audit also observed that in 31 tenders invited during 2016-22, CGMSCL has not mentioned any quantity in schedule of requirement in the tender. In absence of indicative quantity, it was very difficult to obtain competitive rates as well as the benefit linked to bulk purchase.

The Government stated (December 2022) that after finalisation of rate contract demands were received from other user departments, accordingly equipment was purchased.

It is evident from the reply that before inviting the tender CGMSCL did not obtain demand from all the user departments, which had resulted in abnormal variation between tendered quantity and actual purchased quantity.

4.2.9 Irregularities in procurement of equipment and its reagents

CGMSCL procured following diagnostic equipment from a firm⁶ through online tenders based on the indents received from DHS, AYUSH and GMCHs during 2017-22, as detailed in *Table - 4.7*:

Sl. No.	Name of equipment and tender no.	Qty		Total amount of Equipment (₹ in crore)	Duration of procurement of equipment	Duration of Reagent procurement	Quantity of reagent purchased (nos.)	Value of reagent purchased (₹ in crore)	Delay in procurement of reagent (day)
1	Urine Anal- yser (53EP)	105	1,27,440	1.32	Nov 2017 to Aug 2019	Jan 2020 to Dec 2021	8,250	3.21	791
2	Blood Cell C- ounter (53EP)	154	5,07,400	7.81	Jan 2018 to May 2020	Apr 2020 to Dec 2021	6,141	15.90	699
3	Protein Anal-yser Hba1c (53EP)	18	2,65,500	4.78	Nov 2017 to Oct 2018	Jan 2020 to Dec 2021	3,467	13.48	791
4	Fluoride Ion Meter (55EP)	7	4,87,340	0.34	Nov-17	Mar 2020 to Apr 2020	654	3.49	834
5	Carbon Mon-oxide monitor (100EP)	82	1,82,900	1.50	Oct 2018 to Sept 2020	Jan 2020 to Mar 2020	2,010	2.85	457
6	Auto Hemat-ology Anal- yser[109(R)EP]	29	15,08,040	4.37	Nov 2019 to Sept 2021	May 2020	1,466	2.79	192
7	Fully Autom-atic Auto An- alyser(77R/EP)	46	28,26,100	13.00	Mar 2019 to May 2020	Jun 2020 to Dec 2021	9,011	86.55	458
8	Blood Gas A- nalyser(94EP)	31	26,40,960	8.19	Feb 2019 to Mar 2020	Aug 2020 to Jan 2021	29	1.00	547
	Total			41.31			31,028	129.27	

Table - 4.7: Details of diagnostic equipment purchased during 2017-18 to 2021-22

(Source: Compiled from records furnished by CGMSCL)

These diagnostics equipment required various types of reagents for testing/analysis. Accordingly, CGMSCL procured reagents (equipment wise) worth ₹ 129.27 crore during January 2020 to March 2022.

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⁶ M/s Mokshit Corporation

Audit however, observed the following deficiencies:

(a) Deficient tender evaluation process for diagnostic equipment as cost of required reagents were not considered

The diagnostic equipment requires some reagents/testing strips for diagnosis of sample which is a recurring cost depending upon the number of tests conducted through it. Hence, it is important and essential to evaluate the cost of reagents required while inviting the tenders for procurement of equipment. Audit observed that while submitting the indent of above mentioned eight diagnostic equipment, the DHS had failed to identify the requirement of reagents. CGMSCL even failed to invite the composite bid for equipment and reagents after carrying out cost benefit analysis and tenders were finalised based on rate quoted only for diagnostic equipment.

As CGMSCL had invited these tenders as open tender system, hence it was essential to identify the source of supply of its reagents along with the cost of reagents so that the cost effectiveness and efficiency of the procured equipment could be ensured. However, CGMSCL ignored these requirements while inviting tenders and during finalisation of tenders.

The Secretary stated (4 November 2022) in exit conference that the CGMSCL has now changed the system of procurement of diagnosis equipment from open to close system⁷. The MD, CGMSCL further added that in latest tenders of procurement of equipment, they have started evaluating the bids by considering the cost of reagents as well for cost benefit analysis (per test cost).

(b) Purchase of reagents worth ₹ 129.27 crore without inviting tenders considering them as proprietary item without proper analysis and justification

CGMSCL purchased 31,028 reagents kits of ₹ 129.27 crore for the equipment mentioned in *Table - 4.7* from the same vendor as propriety items during January 2020 to March 2022 based on indent received from the DHS. Audit observed that in its indent DHS demanded that the reagent be purchased from the same manufacturer/supplier from which the equipment was purchased. CGMSCL without verifying the proprietary nature of the reagents considered these reagents as proprietary item and executed RCs at the quoted rates of supplier.

Audit further observed that the equipment was procured by CGMSCL as an open system, which *interalia* did not require procurement of consumables/reagents as proprietary nature items. However, while procuring reagents, the supplier declared the equipment as a closed system, which entailed procurement of only compatible reagents for accurate results and proper functioning of equipment. On the basis of propriety certificate from the supplier, the CGMSCL purchased reagent as propriety item and executed RC at quoted rate of supplier. Further, CGMSCL did not obtain any Proprietary Article Certificate (PAC) of the reagent from the user department i.e., DHS. Instead, it collected the self-declaration from the supplier/ manufacturer that the equipment was proprietary of the supplier/manufacturer even though the

⁷ Close system are those analysers which use manufacturer specific reagents only.

self-declaration of the supplier was not supported by any supporting documents such as details of reagents, its patent certificates, nature of proprietary, certification from the Government agency/ organization. etc. Thus, CGMSCL did not assess the requirement of reagent for the equipment at the time of purchase and failed to do due diligence in assessing the cost of reagent while finalisation of rate of equipment.

The Government stated (December 2022) that DHS demanded the reagent of the same manufacturer from which the equipment was purchased.

Reply is not acceptable because CGMSCL did not take proper action to verify the proprietary nature of the items. Further, the demand of specific brand by the DHS cannot be considered as proprietary item.

(c) Idling of diagnosis equipment for want of its reagent/ testing kits

As could be seen from the above *Table - 4.7*, the CGMSCL had supplied various equipment to HIs between November 2017 and February 2019. However, the same were not put to use immediately due to lack of reagents which was actually supplied later between January 2020 and August 2020. Thus, these equipment were kept idle for the period ranging between 192 days and 834 days. This indicates deficient planning at the Directorate level, which failed to assess the requirement of reagents timely.

The Government stated (December 2022) that indent of reagent was received after one year from supply of equipment, accordingly the reagent was procured.

It is evident from the reply that requirement of reagent for the equipment was not assessed while procuring the equipment and therefore, equipment remained idle for want of reagents.

(d) Avoidable loss of ₹6.37 crore due to supply of reagent to healthcare institutions where the testing equipment was not installed

DHS raised (October 2019, March 2020 and August 2020) the indent for reagent for the Protein Analyzer (HBA1C) equipment and accordingly CGMSCL procured (January, June and August 2020) 3,467 kits of reagent valuing ₹ 13.48 crore at the rate of ₹ 38,869.20 per kit.

Audit observed that out of total 3,467 reagent kits procured, CGMSCL supplied (January 2020 to August 2020) 1,639 kit worth ₹ 6.37 crore to ten⁸ HIs where the Protein Analyzer HBA1C equipment was not available. As a result, these reagents could not be used and ultimately reached their expiry at the HIs with consequent loss of ₹ 6.37 crore to the Government exchequer.

The Government stated (December 2022) that reagents were supplied in the HIs as per the demand of DHS. The Director, DHS stated (January 2023) that the matter will be examined and had assured to take appropriate action against those responsible.

⁸ CMHO Raipur, CMHO Sukma, CMHO Dantewada, CMHO Dhamtari, CMHO Rajnandgaon, CMHO Narayanpur, CMHO Kondagaon, CMHO Jashpur, DH Raipur and DH Gourella Pendra Marwahi.

It indicates serious system failure on the part of DHS as well as CGMSCL which supplied the reagent to such HIs where equipment was not installed.

(e) Purchase of reagent at higher rate resulted in extra expenditure of ₹8.88 crore

As mentioned above, the CGMSCL had purchased the 3,467 reagent kits (HBA1C) at the rate of ₹ 38,869.20 per kit and capacity of one kit was 25 tests. At the time of accepting the rate of reagent, the CGMSCL did not assess the reasonability of rate by comparing the prevailing market rate and accepted rates which were on the higher side. Considering the capacity of 25 test per kit, the cost of one test comes to ₹ 1,554, however the same tests were being carried out by the private pathological labs at maximum cost of ₹ 500 per test. This has resulted in extra expenditure of ₹ 9.14 crore⁹ on procurement of 3,467 reagent kits.

The Government stated (November 2022) that the rate was finalised after getting consent from the user department.

Reply is not acceptable because being a central procurement agency it is the responsibility of CGMSCL to procure items at economical rate after conducting due diligence.

4.2.10 Framing tailor-made specification of equipment to qualify only particular bidder

Audit observed that neither user departments nor CGMSCL had finalised the standard generic specifications of generally used/ required medical equipment in the HIs. The specifications of equipment to be purchased were decided by the officials of the Directorates and as a result instead of generic, specifications of branded/trademark items were demanded and procured by the CGMSCL. Some instances are discussed below:

In following four cases, the technical specifications of equipment to be purchased were designed to favour specific suppliers resulting in restricted competition in the tenders invited and procurement of equipment technically through single bid by DHS/CGMSCL:

SI	Name of equipment	Name of supplier	Supplied quantity (Nos.)	Unit rate (₹)	Total cost of equipment (₹ in crore)	Value of reagent purchased
1	Carbon Monoxide monitor	M/s Mokshit Corporation	82	1.83 lakh	1.50	2.85 crore

The DHS in its indent for equipment and reagent prescribed the tailor-made specification, which was not generic in nature. The specifications were exactly same as of the product of manufacturer/supplier with trademark reagents ¹⁰. CGMSCL also ignored the tailor-made specifications which restricted the competition. As a result, only two bids were received against the tender. In respect of one of the bidders i.e., M/s Recorders and Medicare Systems Private Limited whose product was not as per technical specification, the tender committee had qualified it in order to avoid tender finalisation on single bid as the bid of M/s Mokshit was ultimately finalised because the specifications given by it were exactly same as the tender specifications. This indicates collusion among the officials of DHS, CGMSCL and both the bidders.

It is evident that the tenders were invited by framing tailor-made specifications and to extend undue favour to the supplier.

10 D-PieceTM and SteribreathTM mouthpiece

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 $^{(₹ 1554 - ₹ 500) \}times 3,467 \text{ kits } \times 25 \text{ tests}$

Sl	Name of equipment	Name of supplier	Supplied quantity (Nos.)	Unit rate (₹)	Total cost of equipment (₹ in crore)	Value of reagent purchased			
2	Sterigen- C Electro - lyte Concentrate Solution for Sterig - en Disinfectant Gen - eration System	for Sterig - ectant Gen -		23500	13.97				
	Audit observed that CGMSCL invited the tender for Electrolyte Concentrate Solution for Sterigen Disinfectant Generation System with the specific brand name i.e. "Sterigen-C", which is manufactured by only one bidder i.e. M/s Faith Innovations. This resulted in procurement of equipment from M/s Faith Innovation only on the basis of tailor-made specification.								
3	Calorimeter	M/s Esteem Enterprises	4350	5861.63	2.55				
	Audit observed that while placing the indent for calorimeter, the DHS had not sent any specifications and CGMSCL invited tender (20 September 2016) without mentioning any technical specification in violation of rule 4.1 of CGSPR, which prescribes that specification/standards for procured item should be decided before tendering. In response to tender, one of the bidder (M/s Esteem) sought clarification (07 December 2016) from the CGMSCL about the two models of calorimeter (one is digital photo calorimeter and other is microprocessor-based calorimeter) and submitted specification of its digital calorimeter. After that CGMSCL amended (16 December 2016) its tender providing same specifications as received from M/s Esteem. After amendment in tender, only a single bid of M/s Esteem was received and accepted by the CGMSCL. This has resulted in finalisation of tailor-made specifications and consequent undue favour to the bidder.								
4	Fully Automated Auto-Analyser	M/s Mokshit Corporation	34	28.26 lakh	9.61	-			

The Government stated (December 2022) that in all the cases, tenders were finalised on the basis of specifications furnished by the user department.

The reply is not acceptable because CGMSCL should have invited tender on the basis of generic specifications for competitive bidding.

Case study

Irregular finalisation of RC for item reserved for CSIDC under CGSPR and avoidable extra expenditure of ₹3.86 crore

To ensure timely supply of quality material at economical rate to State Government Departments and encourage local Small Scale Industries, the Chhattisgarh State Industrial Development Corporation (CSIDC) was made nodal agency for finalisation of RC for reserved items under rule 3 of the CGSPR. The unreserved items are purchased by the concerned State Government Department by tendering process, as per the rule 4 of the CGSPR.

CGMSCL invited (15 June 2017) tenders for rate contract of 30 types of various equipment based on the indent received (23 September 2016) from AYUSH Department, which also included baby weighing machine

(Item code: AYUSH 27). For baby weighing machine, three bids were received and M/s Nitiraj Engineers Limited quoted the lowest price of ₹ 2,450 per unit, which was accepted by CGMSCL and RC was executed on 16 November 2017 for the validity period upto 15 November 2018. CGMSCL purchased 19,142 units of baby weighing machine valuing ₹ 5.53 crore during the period from January 2018 to February 2020.

Audit observed that baby weighing machine (Mechanical and Electrical both type) was included in the reserved item of the CGSPR. Accordingly, only CSIDC was vested with the power to execute the RC for baby weighing machine (hanging). However, CGMSCL had purchased the reserved item valuing ₹ 5.53 crore in violation of CGSPR, which was irregular.

Further, the user department i.e. Directorate of AYUSH demanded the mechanical type of baby weighing machine (hanging). CGMSCL however, had finalised the RC of electric type baby weighing machine. As per the RC of CSIDC, the rate of mechanical type baby weighing machine (hanging) was ₹876.30, whereas CGMSCL had finalised the RC at the rate of ₹2,450 per unit. Hence, CGMSCL purchased the costlier item, than demanded. This resulted in avoidable extra expenditure of ₹3.01 crore on purchase of 19,142 unit of electric type baby weighing machine against the indent of mechanical type machine.

The Government stated (December 2022) that it had finalised the RC for electronic type weighing machine. Moreover, in pre-bid meeting with bidders, no bidders raised any objection regarding categorisation of this item in CSIDC's reserved item list.

Reply is not acceptable because CGMSCL had finalised the RC of costlier electronic baby weighing machine instead of actual indented mechanical baby weighing machine by the DHS. Further, the act of CGMSCL was against the provision of CGSPR.

Out of total purchase of 19,142 units, 18,666 units were supplied to CMHOs of all districts for onward supply to CHCs, PHCs, SHCs and MCHs whereas, as per IPHS norms 5,513 baby weighing machine were required for 5,513 HIs. As the Department had procured the machine in excess of the requirements, it had invariably resulted in unwarranted purchase of 13,153 baby weighing machine valuing ₹ 3.80 crore.

4.2.11 Finalisation of RCs for equipment in contravention of tender committee recommendation on the basis of single bid received resulting in irregular procurement of equipment worth ₹31.83 crore

CGMSCL invited (5 August 2017) two online tenders (Tender No. 58 and 59) for finalisation of RCs for procurement of various medical equipment based on the indent received (June 2017) from Pt. Jawahar Lal Nehru Medical College, Raipur and GMCH, Jagdalpur. The details of bids received in above tenders are given in the following *Table - 4.8*:

Table - 4.8: Details of bids received for tender numbers 58 and 59

	Tender no.	Total bidders participated	Date of technical evaluation	Technically qualified bidders	No. of equipment	Date of price bid	No. of equipment for multiple bid received	No. of equipment for single bid received
	58	17	16/03/2018	13	17	20/03/2018	4	13
ſ	59	10	05/02/2018	8	9	06/02/2018	2	7

(Source: Compiled from records furnished by CGMSCL)

As evident from the above table that in these two tenders single bid were received for 13 and seven number of equipment. So, the tender committee recommended (20 March 2018 and 6 February 2018) for retendering of items for which single bid was received.

Audit however observed that MD, CGMSCL had finalised the rates of single bid items overlooking the recommendation of tender committee after negotiation with the bidders without going for retendering. Thus, finalisation of RCs of single bid items and procurement of equipment worth $\stackrel{?}{\stackrel{\checkmark}{}}$ 31.83 crore (as detailed in the *Appendix - 4.4*) were irregular.

4.2.12 Avoidable extra expenditure due to finalisation of tenders at higher rate – ₹ 3.26 crore

Audit observed that CGMSCL had finalised RCs in the following four cases without due diligence and ensuring reasonability of quoted rates which led to avoidable extra expenditure and consequent loss to the Government exchequer.

4.2.12.1 Procurement of IV stand for supply to healthcare institutions of DHS at higher rate, despite having available RC at lower rate resulted in avoidable extra expenditure of ₹1.24 crore.

Based on the indent received for IV Stand from DHS and AYUSH, CGMSCL finalised two separate tenders, as detailed in the following *Table - 4.9*:

Table - 4.9: Details of indent received and tender finalised for procurement of IV stand

Sl	Particulars	Tender no. 86 EP	Tender no. 67(R2) EP		
1	User Department, from which indent was received	DHS	AYUSH		
2	Date of indent	13-Dec-17	02-Aug-18		
3	Indent quantity	70	68		
4	Date of tender	04-Apr-18	08-Aug-18		
5	Indicative tendered quantity (variable as per requirement)	70	68		
6	Date of opening of price bid	26-Sep-18	15-Nov-18		
7	L1 Rate (₹ Per unit)	1936.38	4128.82		
8	Name of L1 bidder	M/s Carevel Medical System Private Limited	M/s Bansal Lifesciences		
9	Date of approval of rate	17-Dec-18	05-Mar-19		
10	Total quantity purchase by DHS	115	5670		
11	Total purchase value by DHS (in ₹)	2,22,684	2,34,10,409		
12	Duration of purchase	11-May-20	19 June 19 to 21 Mar 2020		
13	Total purchase by AYUSH	0	0		

(Source: Compiled from records furnished by CGMSCL)

DHS placed (December 2017) an indent for 70 IV stand (two hook top) with CGMSCL. CGMSCL floated (4 April 2018) tender no. 86 for IV stand and finalised the tender (December 2018) at a rate of ₹1,936.38 per unit with M/s Carevel Medical System Private Limited. Against the indented quantity, purchase order (PO) was placed with the supplier by CGMSCL in May 2020. Meanwhile, CGMSCL also received (2 August 2018) the indent for IV stand (four hook top) from AYUSH for which CGMSCL floated (08 August 2018) separate tender no. 67(R2) which was finalised (March 2019) at a rate of ₹4,128.82 per unit with M/s Bansal Lifescience. The Directorate of AYUSH however did not purchase any quantity of IV Stand under this RC so far.

Audit however observed that after finalisation (March 2019) of second RC for IV stand at higher rate with M/s Bansal lifescience, DHS placed indent of 5,670 units for IV stand (four hook top) during 2019-21 without recording any justification for demanding costlier version of IV stand. CGMSCL also issued PO under tender no. 67(R2) to M/s Bansal Lifescience at the rate of ₹4,128.82 per unit.

This has resulted in avoidable extra expenditure of ₹ 1.24 crore¹¹ on purchase of 5,670 IV Stand and undue financial benefit to M/s Bansal Lifesciences.

CGMSCL stated (November 2022) that IV stand was supplied to DHS as per the specific demand of IV stand which was finalised against the indent of AYUSH. It was further stated that specifications of the IV stands were different. The Director, DHS stated (January 2023) that the reasons for demanding IV stand of costly version will be examined and assured to take the appropriate action against the responsible.

It is evident from the reply that DHS willfully demanded the costly IV stand (finalised against AYUSH indent) in comparison to the RC finalised for DHS to extend the undue benefit to the supplier, which ultimately resulted in loss to the Government.

4.2.12.2 Cancellation of tender for Microscope neurosurgery on unjustifiable ground and finalisation of subsequent tender at higher rate resulted in loss of ₹1.08 crore

CGMSCL invited (August 2016) online tenders from manufacturers/ authorised distributors for procurement of Microscope Neurosurgery for DKSPGI. In response, two bids were received from M/s. Bagree Enterprises (M/s Bagree) and M/s Varad Corporation (M/s Varad) and both the bidders had qualified (December 2016) on technical evaluation. Accordingly, price bids of both the bidders were opened on 15 March 2017. M/s Bagree quoted the rate of ₹ 2.41 crore and M/s Varad quoted the rate of ₹ 3.39 crore. After opening the price bids, M/s Varad represented and stated that M/s Bagree has not quoted for some vital features i.e., "Image injection for CT, MR, Endoscopes with neuro navigation compatible with the system" and rate offered by M/s Varad includes the cost of Image Injection as well, which makes the bid costlier than that of the M/s Bagree. Ultimately, CGMSCL cancelled (29 August 2017) the tender for Microscope Neurosurgery (Item Code: DKS31).

^{11 (₹ 4128.82 – ₹ 1936.38)} x 5670 unit = ₹12431134

CGMSCL re-invited (28 June 2017) online tender [Tender no. 49(R)] for the same item and one bid was received from M/s. Bagree Enterprises (M/s Bagree) which was qualified (12 February 2018) after technical evaluation. The price bid was opened on 16 February 2018 and the rate of ₹ 3.49 crore quoted by M/s Bagree for Microscope Neurosurgery was accepted by the CGMSCL and PO was issued (21 March 2018).

Audit observed that in the first tender (Tender no. 35/E/P) the rate of Microscope Neurosurgery offered by M/s Bagree was lesser and as per the technical specification of the tender, technical committee had qualified M/s Bagree. Moreover, during demonstration of the Microscope Neurosurgery, user department also recommended the product offered by M/s Bagree.

Since the first bid of M/s Bagree at the quoted rate of \mathbb{Z} 2.41 crore was technically qualified and user department also recommended the equipment, procurement of same equipment at higher rate of \mathbb{Z} 3.49 crore was not justifiable and against the standard of financial propriety. This resulted in avoidable expenditure of \mathbb{Z} 1.08 crore on the purchase of the equipment.

The CGMSCL stated (April 2019) that M/s Varad made a complaint on specification of the equipment. CGMSCL convened the meeting with the representatives of both the bidders i.e., M/s Bagree and M/s Varad to resolve the complaint, but no decision was taken in that meeting and CGMSCL cancelled the tender.

Reply is not acceptable because in the first tender, the bidder (M/s Varad) was technically qualified and its product was also qualified in demonstration by the user department, however, CGMSCL had cancelled the tender without any justifiable ground. As a result, it had to procure the equipment at higher rate in subsequent tender.

4.2.12.3 Avoidable extra expenditure of ₹56.70 lakh on procurement of Advance Heart Lung Machine at higher rate

As per price fall clause (Clause 8) of the tender "the bidder undertakes that it has not supplied/is not supplying similar product/systems or subsystems at a price lower than that offered in the present bid to any other Department of the Government of Chhattisgarh or a PSU and if it is found at any stage that similar product/ systems or sub systems was supplied by the bidder to any other Department of the Government of Chhattisgarh or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the bidder to the buyer, if the contract has already been concluded."

CGMSCL finalised (22 July 2019) the RC for procurement of Heart Lung Machine with Heater cooling unit (S5 with 3T) at the rate of ₹ 1.25 crore plus GST at the rate of 12 *per cent* per unit with M/s Sarv Health Care Private Limited Mumbai. Audit observed that M/s Sarv Health Care Private Limited had entered RC with Kerala Medical Services Corporation Limited (KMSC) for the same equipment of the same manufacturer at lower rate of ₹ 75 lakh (₹ 53 lakh Hearth lung machine + ₹ 22 lakh Heater cooling unit) plus GST at rate of 12 *per cent* per unit which was valid upto October 2020. It was further observed that in support of experience, M/s Sarv Health Care furnished the

details of supplies to various medical institutions at rates ranging between ₹88.00 lakh and ₹91.72 lakh per unit. CGMSCL however, finalised the tender for Heart Lung Machine at ₹1.25 crore which was 40 *per cent* higher than the rates of supply to KMSC. Further, despite the availability of price fall clause in tender, CGMSCL did not insist the supplier to reduce the rate and to match the rate of KMSC. This had resulted in finalisation of rate contract at higher rate and consequent avoidable extra expenditure of ₹55.50 lakh¹².

The Government stated (December 2022) that equipment supplied at KMSCL was lower end machine in comparison to CGMSCL supply. Due to this the rate of CGMSCL was higher than the supply at KMSCL.

The reply is factually incorrect as the model no. (S5 with 3T) of the equipment supplied at Kerala and CGMSCL was the same.

Non-finalisation of tender for Central Monitoring System and it's consequent purchase at higher rate on nomination basis resulted in avoidable extra expenditure of ₹36.78 lakh.

Rule 4.3.3 of the CGSPR stipulates that all the Government purchases valuing more than ₹ one lakh is to be made through open tendering process.

Audit observed that on the basis of indent received (July 2017) from GMCH, Raipur, CGMSCL invited (August 2018) tender for procurement of various type of 15 equipment, which also includes the Central Monitoring Station (item code GMCR002).

In response to the tender, two bidders participated in the tender for three different equipment. After evaluation of the bid and demonstration of equipment, the technical committee qualified both the bidders for all the three items. Accordingly, the price bids were opened and CGMSCL finalised the tender for two items except Central Monitoring Station, for which no reasons were recorded. The details are given in *Table - 4.10*:

Item code	Item description	Quoted rate/ accepted rate (₹)	Name of bidder	
GMCR001	Multipara Monitors with wall Mounted adjustable stands with Central Monitoring station	4,45,760.00/ 4,41,302.40	M/s Bagree Enterprises Raipur	
GMCR032	Neonatal Pediatric Ventilator with Attached Bubble CPAP device	18,46,650.40/ 18,28,183.84	Schiller Healthcare India Pvt. Ltd	
GMCR002/ Station001	Central Monitoring Station compatible with above multipara	2,40,550 (L1) Tender not finalised	M/s Schiller Health Care (I) Pvt Ltd	
	monitor	6,94,400.00/ (L2) Tender not finalised	M/s Bagree Enterprises Raipur	

Table - 4.10: Details of finalisation of rate for medical equipment

(Source: Compiled from records furnished by CGMSCL)

Audit observed that after lapse of one year, CGMSCL purchased three units of Central Monitoring Station from M/s Bagree on nomination basis at the rate of ₹ 14.67 lakh per unit without inviting tender, which was about 509 *per cent* higher than the L1 rate received in the previous tender. Purchase of equipment

^{(₹ 1,24,55,000 - ₹ 75,00,000) +} GST @12 per cent

on nomination basis at higher rate without inviting tender was against rule 4.3.3 of CGSPR. This has resulted in irregular purchase of Central Monitoring Station valuing ₹ 44.01 lakh and consequent avoidable extra expenditure of ₹ 36.78 lakh¹³ due to purchase at higher rate.

4.2.13 Unwarranted procurement of equipment

In the following four instances, the equipment was procured by CGMSCL without assessing the requirement of the same by the Directorates and CGMSCL which led to unwarranted procurement and consequent loss to the Government exchequer/ blocking of funds.

4.2.13.1 Unwarranted procurement of Biosafety Cabinet valuing ₹72.41 lakh

The DHS forwarded (March 2016) AI for 272 various equipment for the year 2016-17 to CGMSCL which included 31 Biosafety Cabinets.

CGMSCL supplied (June 2016 to December 2016) 31 Biosafety Cabinets valuing ₹ 72.41 lakh to various HIs by finalising (June 2016) the RC. After procurement of all the 31 Biosafety Cabinets, DHS informed (April 2017) CGMSCL to cancel its previous indent on the grounds of improper assessment of requirement by the technical committee of the DHS/CMHOs and sought clarification from responsible officers. As the equipment was already supplied in 2016, the PO thus could not be cancelled. This indicates the lackadaisical approach of the DHS in the assessment of the requirement of equipment before placing indent to CGMSCL.

The absence of a proper system of indenting, i.e., after assessment of actual requirements by DHS, has resulted in unwarranted purchase of Biosafety Cabinets valuing ₹ 72.41 lakh, as the equipment could not be utilised in the facilities.

The GoCG stated (January 2023) that equipment was used during the COVID-19 pandemic.

It is evident from the reply that equipment was procured during June 2016 to December 2016 without any requirement and it remained idle till 2020-21 till they were put to use during COVID pandemic i.e., after four years from the purchase.

4.2.13.2 Unwarranted purchase of Calorimeter resulted in avoidable loss of ₹1.44 crore due to unrealistic indent by DHS

CGMSCL finalised the tender of Calorimeter with M/s Esteem Enterprises (Supplier) on single bid at a negotiated price of ₹ 5,861.63 per unit and purchased (March 2017) 4,350 units of Calorimeter as detailed in *Table - 4.11*:

Table - 4.11: Details of purchase of Calorimeter

Sl. no.	Purchase order no. and date	Qty.	Date of supply	Rate per unit including tax (₹)	Total Amount (₹)
1.	1045/ 25.03.17	2,250	March 2017	F 961 625	1,31,88,656.25
2.	1130/30.03.17	2,100	May 2017	5,861.625	1,23,09,412.50
Total		4 350			2 54 98 068 75

(Source: Compiled from records furnished by CGMSCL)

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^{13 (₹14.67} lakh - ₹ 2.41 lakh) x 3= ₹ 36.78 lakh

Out of total 4,350 units of Calorimeter procured in March 2017, the CGMSCL had issued 2,938 units to the hospitals upto June 2022 and remaining 1,412 units worth ₹ 82.77 lakh was lying at the warehouses of CGMSCL. Further, out of 2,938 Calorimeters, 1,040 Calorimeters valuing ₹ 60.96 lakh was lying at the stores of HIs, as of February 2021.

Audit observed that as per the IPHS norms there were only 835 healthcare facilities in which calorimeter could be used in the State as of March 2017. Thus, there was overall requirement of 835 calorimeters¹⁴. Against this, the DHS, without obtaining the demand from its HIs, had assessed the requirement of 7,394 units of calorimeter which was on abnormally higher side. This indicates that indents were prepared without assessing the actual requirement at DHS level and CGMSCL also failed to scrutinise the indent properly. As a result, as of June 2022, 2,452 units¹⁵ of Calorimeters valuing ₹ 1.44 crore¹⁶ were lying idle at warehouse of CGMSCL and in the stores of HIs. Supply of calorimeter to HIs in excess of the IPHS norms causes a doubt on the actual utilisation of the distributed quantities.

The Director, DHS instructed (January 2023) the concerned Deputy Director to verify the reasons for indenting on an unrealistic higher side.

4.2.13.3 Purchase of micro pipette in excess of the requirement resulted in unwarranted purchase of ₹20.92 crore

The DHS forwarded (24 April 2017) the indent for Micro Pipettes for 36,131 units of 10-50 (including 5,000 unit of 10-100) micro litre variant to CGMSCL for procurement as against the IPHS norms of 440 micro pipettes (all capacity) for all the HIs.

Based on the indent, CGMSCL finalised (15 June 2018) the tender (No. 83EP) at the rate of ₹ 5,841 per unit. In the meantime, HIs of DHS raised the online indent of 321 Micro Pipette and the same was also forwarded (28 June 2018) to CGMSCL by the DHS. CGMSCL had procured 36,126 Micro Pipette valuing ₹ 21.10 crore during the period from 31 July 2018 to 12 September 2018.

Audit observed that indent of 36,131 units by the DHS was on an abnormally higher side and was 112 times more than the actual quantity of 321 demanded/indented by the 11 CMHOs and 21 DHs. The procured Micro Pipettes were issued to various CMHOs in equal quantities of 1,338 in each district without any requirement. This had resulted in the purchase of 35,810 Micro Pipettes valuing ₹ 20.92 crore without any demand from the HIs.

The DHS stated (January 2023) that matter is under enquiry at CGMSCL level.

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As per IPHS norms, one calorimeter is required in PHC and Civil Hospitals. There are 816 PHCs and 19 Civil hospitals in the State.

^{15 1412} at CGMSCL and 1040 at stores of hospitals

At CGMSCL warehouses 1,412 units valuing ₹ 82.77 lakh and at HIs stores 1,040 units valuing ₹ 60.96 lakh.

4.2.13.4 Unwarranted procurement of costlier stethoscope

Based on indent received (4 June 2018) from the Directorate of AYUSH, CGMSCL finalised (11 September 2019) the tender for stethoscope with M/s CB Corporation at the rate of ₹ 7,840 and purchased (September 2021) 5,572 quantity costing ₹ 4.37 crore.

Audit observed that as per IPHS norms 2,615 stethoscopes were required for 243 DHs, CHs, CHCs and MCHs in the State. As against this, DHS had demanded 5,572 stethoscopes which were ultimately procured by CGMSCL. This has resulted in unwarranted procurement of 2,957 stethoscope valuing ₹ 2.32 crore.

Audit further observed that the user department had demanded normal stethoscopes at the estimated cost of \mathbf{T} 500 per unit. However, ignoring the demand and overlooking the economy aspect in the procurement, the CGMSCL had procured costlier imported stethoscopes at the rate of \mathbf{T} 7,840 each against the estimated cost of \mathbf{T} 500.

4.2.14 Unfruitful expenditure on procurement of PET-CT machine

CGMSCL invited (June 2018) tender for supply of Gamma camera and PET CT for GMCH, Raipur from manufacturers/ authorised distributors. The terms and conditions for service provider were to build, supply, install, operate/run and maintain for eight years including free maintenance of the whole system for three years as guarantee period and additional post guarantee maintenance cost for five years.

The tender was finalised (August 2018) with M/s Labindia Healthcare Private Limited Mumbai (M/s Labindia) on L1 rate at a total value of ₹ 18.46 crore. The Labindia supplied (31 January 2019) and installed (21 February 2019) the equipment after completion of construction work. However, the equipment was lying idle at GMCH, Raipur due to non-commissioning. The equipment procured and installed at GMCH, Raipur is as shown below in photograph number 1:



In this connection Audit observed the following shortcomings:

(i) Procurement of equipment without finalisation of operational modalities

Audit observed that after installation, the supplier had not commissioned the equipment, as of January 2023 despite agreement (August 2019) with the supplier for commissioning and operationalisation of equipment. The equipment, however, could not be put to use due to non-finalisation of operational modalities between the supplier and the Government which resulted in idling of equipment costing ₹ 18.46 crore besides deprival of intended services to the general public.

(ii) Irregular release of payment of ₹ 2.09 crore to M/s Labindia without obtaining the requisite certificate of operation of equipment

As per terms of the contract, 80 *per cent* of the payment is to be made after commissioning of equipment and balance 20 *per cent* after receipt of certificate on working status from the consignee along with licenses from AERB for running the unit.

It was observed that after supply (January 2019) and installation (February 2019) of the equipment, M/s Labindia raised the invoice of ₹ 10.46 crore. After releasing (April 2019) 80 per cent of the contract amount (₹ 8.36 crore) CGMSCL also paid (May 2019) the balance 20 per cent i.e., ₹ 2.09 crore M/s Labindia after one month without commissioning of the equipment and before obtaining license for operation from the AERB, as the same was received only in December 2019.

4.2.15 Idling of medical equipment

4.2.15.1 Idling of equipment in GMCHs valuing ₹8.13 crore

Audit observed that 21 medical equipment valuing ₹ 8.13 crore was kept idle in HIs due to various reasons i.e., technical fault, non-availability of vital parts, non-supply of reagents/ kits, non-construction of necessary infrastructure, non-providing training to its staff etc., as discussed below:

- Eight types of equipment valuing ₹ 4.35 crore installed at three ¹⁷ GMC/GMCHs were lying idle for period ranging between 158 and 1,346 days (May 2018 to August 2021) due to technical fault/ non-availability of vital parts. The HIs did not make any effort to consult the suppliers to resolve the technical fault and the equipment was still lying idle even though five out of eight equipment were under warranty period.
- Similarly, five types of equipment valuing ₹ 2.13 crore installed at GMC Jagdalpur, Raipur, Rajnandgaon, GMCH Jagdalpur and Rajnandgaon were lying unutilised for periods ranging between 440 and 1,468 days (from December 2017 to January 2021) for want of required reagents/kit/consumables.
- ➤ Further, Rigid Thoracoscope valuing ₹ 57.69 lakh installed (July 2018) at GMC, Raipur was not being utilised since its installation. Similarly,

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GMC Jagdalpur, GMC Raipur and GMCH Rajnandgaon

CO₂ incubator valuing ₹ 15.03 lakh installed (November 2018) at GMC, Jagdalpur, which was under warranty up to November 2021, was lying idle since July 2019 till November 2019. The reasons for non-utilising the equipment could not be ascertained from the records.

- The Brainstem-evoked response Audiometry (BERA) machine used for early identification of hearing impairment in children and neonates valuing ₹ 15.95 lakh installed in GMC Jagdalpur could not be utilised since its installation (March 2019) due to non-construction of soundproof room. The GMCH Jagdalpur also did not take any steps for construction of soundproof room.
- ➤ The multiple laser suit valuing ₹ 13.97 lakh installed (November 2018) at GMCH Jagdalpur was not being utilised since its installation due to non-availability of trained staff. At the time of installation, the GMCH, Jagdalpur had however, certified that necessary training was provided to staff for operating the equipment.
- Four medical equipment i.e., Treadmill, Spectrophotometer, Electroencephalogram and Video EMG and Nerve Conduction Velocity Machine valuing ₹ 62.27 lakh were supplied to GMC, Ambikapur through CGMSCL. The four medical equipment were installed in non-clinical departments whereas as per NMC norms they were to be installed only in clinical departments. Thus, the four medical equipment were lying idle for a period ranging between one and 3.5 years since their installation.

Government stated (April 2023) that instructions have been issued to the concerned HIs to put these equipment to use at the earliest.

4.2.15.2 Idling of medical equipment in District Hospitals valuing ₹8.66 crore

The Annual Maintenance Contract (AMC) for maintenance of equipment in all HIs of Chhattisgarh, was awarded (April 2018) to Mediciti Health Care Services Private Limited (Service provider). Accordingly, service provider had prepared the equipment profile and status list by tagging all the equipment of HIs.

Audit had shortlisted the equipment valued above ₹ One lakh from the database of service provider and conducted the physical verification of selected DHs in Kondagaon, Baikunthpur (Korea) and Bilaspur.

During physical verification following observations were noticed:

- In three DHs, 90 equipment valuing of ₹ 5.73 crore were lying idle. Operational condition of these idle equipment were deteriorating due to non-utilisation. The purpose of obtaining these equipment, date of receipt and installation was not on the records of the DH.
- ➤ Further, as per profile, 28 high value equipment worth ₹ 1.36 crore were proposed for condemnation by the service provider; however, no action were taken for disposal of these equipment.
- During the joint physical verification in three DHs, 53 equipment worth ₹ 1.57 crore included in the list of equipment geo-tagged for AMC were

not found and Bio Medical Engineer was unable to explain the reasons for the same.

4.2.15.3 Idling of equipment in Primary HIs

Audit observed that 357 medical equipment valuing ₹ 4.55 crore were kept idle in selected districts/CHCs/PHCs due to various reasons i.e. non-supply of reagents, lack of manpower and unwarranted supply as discussed below:

- ➤ Thirty-four medical equipment valuing ₹ 2.07 crore supplied to 16 CHCs/PHCs of selected districts were kept idle due to non-availability of reagents/manpower/infrastructure facilities. (*Appendix 4.5*)
- ➤ Three hundred and seventeen equipment such as (ICU beds, Carbon Monoxide Monitor, Instrument trolley, Cautery Machine etc.) valuing ₹ 2.24 crore were supplied to 13 CHC/PHC and six CMHO of selected districts without any indent from these facilities resulting in these equipment remaining idle. (*Appendix 4.6*)
- ➤ Six equipment valuing ₹ 24.05 lakhs were supplied to five CHC/PHC but due to lack of manpower they remained idle. (*Appendix 4.7*)



2. Breast Cancer Detector, CHC Konta (06 Jan 2022)



3. Auto clave HP Vertical, CHC Kota, Bilaspur (25 March 2022)



4. Biochemistry Analyser, CHC Janakpur, Korea 28 April 2022



5. Urine Analyser, CHC Janakpur, Korea 28 April 2022

4.2.16 Non-recovery of penalty of ₹ 4.62 crore from the supplier due to delay in supply of materials

The CGMSCL has procured various equipment for *Dau Kalyan Singh* Post Graduate Institute and Research Centre (DKSPGI) against tender nos. 50/EP, 49(R), 42/R, 45/EP, 42/EP and 35/R3. As per terms of the tender, the entire ordered quantity was to be supplied within 60 days from the date of purchase order. In case of delay, penalty at the rate of 0.2 *per cent* per day subject to maximum of 12 *per cent* of contract value of unexecuted quantity was recoverable from the bill. If the delay is more than 120 days, the purchase order was to be deemed to be cancelled.

Audit observed (July 2021) that four suppliers¹⁸ did not supply the equipment in time in respect of said tenders. The same were supplied with delay ranging between 142 and 477 days. However, CGMSCL released the payment of ₹ 38.51 crore without recovering penalty of ₹ 4.62 crore from these suppliers (detailed vide *Appendix - 4.8*). Further, in six cases, three suppliers supplied the material after 120 days which was accepted by CGMSCL in violation of tender conditions.

Releasing the payment without recovery of penalty of ₹ 4.62 crore for delayed supply was not only irregular, but it was also invariably extension of undue financial benefit to suppliers.

Procurement of drugs, medicines and consumables

On review of the finalisation of RCs for drugs, medicines and consumables, Audit observed the following:

4.2.17 Purchase of drugs at higher rates

4.2.17.1 Purchase of drugs and medicines at higher rate due to lack of monitoring of prevailing market price resulting in extra expenditure of ₹5.05 crore

As per the tender documents, an undertaking was to be obtained from the bidders that the instant item was not supplied to any organisation at lower rate than the quoted rate during last six months and will also not supply the item at lower rate than the quoted rate to any organisation during the validity of RC finalised against this tender. In case of violation of declaration, the Tender Inviting Authority can forfeit the Earnest Money Deposit and/or Security Deposit and/or blacklist the firm for a period of five years.

The tender documents also stipulated that if bidder supplies the similar product at lower than the offered price in any other Department of the Government of Chhattisgarh or PSU, then that very price will be applicable to the present case and the difference in the cost would be refunded by the bidder to the buyer.

Audit observed that 23 suppliers who supplied drugs to CGMSCL during the period (April 2017 to October 2020) had also supplied 39 drugs and medicines

M/s Mokshit Corporation, M/s Mediglobe Medical System Private Limited, Arjo Huntleigh Healthcare India Private Limited and M/s MDD medical System India Private Limited

to other PSUs (State Medical Services Corporations) at lower rates during the same period (detailed vide *Appendix - 4.9*). CGMSCL purchased the drugs amounting to ₹31.12 crore upto October 2020 at higher rates from these suppliers despite furnishing the undertakings in prescribed format. Thus, due to lack of monitoring of prevailing market rate by the CGMSCL, there was avoidable extra expenditure of ₹5.05 crore. CGMSCL also did not take any action to recover the extra expenditure or blacklist the concerned firms.

The Director, DHS stated (December 2022) that one officer from DHS has been posted for monitoring of drugs, consumables and equipment purchase in CGMSCL.

The fact remains that there was no mechanism in place in the CGMSCL for monitoring the rate offered by suppliers to various clients which has ultimately resulted in extra expenditure of ₹ 5.05 crore.

4.2.17.2 Extension of undue benefit to supplier resulted in avoidable extra expenditure of ₹one crore on purchase of RD Kit

CGMSCL received (July 2018) an indent for Rapid Diagnostic Kit-10 (RD Kit) for malaria from DHS. Accordingly, it had initiated the purchase process of RD Kit through Government e-Marketing (GeM) portal and uploaded the requirement/ specification of RD Kit on GeM portal on 24 August 2018 with due date of submission of bid as 27 August 2018. In response, nine bids were received and after evaluation of bids, CGMSCL had finalised (29 August 2018) the bid of M/s Voxtur Bio Limited (M/s Voxtur) and procured eight lakh units of RD Kit at the rate of ₹ 151.76 per unit 19 with total cost of ₹ 12.14 crore.

Audit observed (March 2019) the following shortcoming:

To ensure the quality of products and soundness of the supplier, CGMSCL fixes the Pre-Qualification Requirement (PQR). The pre-qualification criteria states that the bidder shall be a manufacturer having valid own manufacturing license issued by State Drug Controller or direct importer holding valid import license issued by Central Drug Standard Control Organisation (CDSCO). But in the instant case CGMSCL mentioned the license no. (MH/101421 dated 01/08/2015) of specific supplier as eligibility criteria in the tender documents. The license no. (MH/101421 dated 01/08/2015) was issued by Food and Drug Administrator, Maharashtra State to M/s Voxtur. As a result, out of nine participating bidders eight were rejected on the ground of non-fulfilment of bid requirement and M/s Voxtur, sole holder of the said license became the only eligible supplier. Thus, specific modifications were made in the PQR to qualify the supplier.

As per Rule 4.5 of the CGSPR, the time limit for submission of bid for open tender for value more than ₹ 10 lakh is 30 days. However, Audit observed that in the instant case, CGMSCL uploaded the terms and conditions and requirement of RD Kit on 24 August 2018 with due date of submission of 27 August 2018 allowing only three days against 30 days as per the CGSPR which was violation of CGSPR and thus, it restricted the competition resulting

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Each unit contains 10 RD Kit

in receipt of only one bid. Further, The Chief Executive Officer of GeM had also objected (10 September 2018) to the process adopted by CGMSCL and raised questions about the fairness of bidding process. However, CGMSCL did not initiate any steps for conducting enquiry in this regard.

Audit observed that CGMSCL had finalised (29 August 2018) the bid at the rate of ₹151.76 per unit through GeM portal without assessing the reasonability of prevailing rates. Madhya Pradesh Public Health Services Corporation Limited (MPPHSCL) had finalised (July 2018) the RC of RD Kit at the rate of ₹139.22 per unit from M/s Aspen Laboratories Private Limited through open tender. Thus, CGMSCL had procured the RD Kit at rates which were higher by ₹12.54 per unit, resulting in avoidable expenditure of ₹1.00 crore.

The CGMSCL had accepted (February 2020) the Audit observation and stated that matter was referred to the Government for initiating action. However, the Government has not taken any action so far (March 2023).

4.2.17.3 Purchase of drugs amounting to ₹13.14 crore at higher rates without inviting tenders and by ignoring the existing RC resulted in avoidable extra expenditure of ₹1.86 crore

On the basis of the indent received (July 2016) from AYUSH, CGMSCL after finalising the RC tenders of Ayurvedic, Homeopathic and Unani Medicines for one year, as detailed in *Table - 4.12*, had purchased (July 2017 to December 2018) various Ayurvedic, Unani and Homeopathy medicines worth ₹ 12.17 crore from the suppliers.

Table - 4.12: Statement showing details of RC finalised in respect of Ayush

Sl	Tender no.	Particulars	Date of finalisation of RC
1	01/Ayurvedic-classical, dt 06/03/2017	Ayurvedic Medicines	July 2017
2	01/Homeo, dated 25/01/2017	Homeopathic Medicines	July 2017
3	01/Unani, dated 04/02/2017	Unani Medicines	July 2017

(Source: Compiled from records furnished by CGMSCL)

The CGMSCL again received (January and February 2018) indent for various Ayurvedic, Homeopathic and Unani medicines and in response, it purchased the indented medicines amounting to ₹ 13.14 crore on nomination basis from M/s Pharmaceutical Corporation (Indian Medicines) Kerala Ltd. (Oushadhi); M/s The Kerala State Homoeopathic Co-operative Pharmacy Ltd. (HOMCO) and M/s Indian Medicines Pharmaceutical Corporation Limited (IMPCL) without inviting any tender.

Purchase of the medicines without inviting tender was not only a violation of Rule 4.3.3 of CGSPR, it was also against the set principles of public procurement/CGSPR (as amended) of the State Government and hence irregular.

Audit further observed that the rates of medicines of M/s Oushadhi, M/s HOMCO and M/s IMPCL were higher than the existing valid RCs

finalised under tenders²⁰. However, overlooking the available lower rates of existing RC, CGMSCL purchased medicines costing ₹ 13.14 crore from the three suppliers, that too without inviting tenders. This has resulted in avoidable extra expenditure of ₹ 1.86 crore.

4.2.17.4 Finalisation of RC at higher rate due to reduction in indented quantity resulted in deprival of benefit of bulk purchase and consequent avoidable loss of ₹4.09 crore

On the basis of indent received (February 2018 and January 2019) from the Department for supply of Paracetamol I.P. tablet 500 mg and Rapid Diagnostic (RD) Kit for Malaria testing, the CGMSCL had finalised the RC with M/s Medico Remedies Private Limited and M/s SD Biosensor respectively, as detailed in the *Table - 4.13*:

Table - 4.13: Statement showing details of RC 152inalized in respect of two drugs

S. N.		Indent month	Indent quantity	Tendered quantity	Date of finalisation of tender	Final rate (₹ per unit including taxes)	Name of supplier	Supplied quantity (in lakh)	Value of supply (₹ in crore)
1	Paracetamol I.P. tablet 500 mg (D395)	January 2018 to February 2018	16.28 lakh unit ²¹ (1 unit contain 10 x 10 Tablet)	23,700 unit	17/12/2018	36.96	Medico Remedies Pvt Ltd	34.79	12.86
2	Rapid Diag - nostic (RD) Kit for Mal - aria testing (D454M)		5.09 lakh unit ²² (1 unit contain 10 kit)	3,120 unit	14/02/2020	123.09	SD Biosensor	24.81	30.54

(Source: Compiled from records furnished by CGMSCL)

Audit observed that in both the tenders, despite the indent for 16.28 lakh unit of Paracetamol Tablet and 5.09 lakh unit of RD kit for malaria, CGMSCL mentioned the requirement as 23,700 unit and 3,120 unit respectively in the tenders. As evident from *Table - 4.13*, the required quantity was reduced considerably at the time of tendering i.e., about 99 *per cent* less than the actual requirement. After finalisation of tenders, CGMSCL later procured 34.79 lakh and 24.81 lakh units of respective drugs. Thus, despite substantial requirement of drugs, only one *per cent* of the required quantity was tendered and later required quantity of drugs were purchased. Hence, due to the reduction in the required quantity during tendering, the benefit of bulk purchase could not be availed.

Audit also noticed that the same drugs during the same period were purchased at the lower rate by the other States PSUs, as detailed in *Table - 4.14*:

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Tender no. 01/Ayurvedic-Classic, 01/Homeo and 01/Unani

DHS: 10.59 lakh unit; DME: 0.23 lakh unit; and Mitanin: 5.46 lakh unit

DHS: 5.00 lakh unit and DME: 0.9 lakh unit

Table - 4.14: Details of RC of the supplier in other states

Name of	Name of supplier	Rate (₹ per unit	Validity					
other state		including GST)	From	То				
Paracetamol I.	Paracetamol I.P. tablet 500 mg (D395)							
Madhya Pradesh	Cipco Pharmaceuticals	29.80	01/09/2020	31/08/2022				
Gujrat	Deep Pharma	28.89	20/11/2018	30/09/2020				
Rapid Diagnostic (RD) Kit for Malaria testing (D454M)								
Madhya Pradesh	Aspen Laboratories Limited	116.66	15/09/2020	14/03/2022				

(Source: Compiled from records furnished by CGMSCL)

This has resulted in avoidable extra expenditure of ₹ 4.09 crore (₹ 2.49 crore²³ for paracetamol and ₹ 1.60 crore²⁴ for RD malaria kit).

CGMSCL stated (August 2022) that tender was invited on 9 July 2018 after receipt of indent from DME in February 2018 for 23,700 units. After invitation of tender, indent for 5.13 lakh units was received from DHS on 12 July 2018. Therefore, the tender was invited with the indicative quantity of 23,700 units. Moreover, during the negotiation, the rate was reduced from ₹33.75 to ₹33 per unit.

The reply is not acceptable as the CGMSCL issued seven amendments from 12 July 2018 to 31 August 2018 for deletion/review of tendered items and extension of due date of submission of bids without amending the quantity.

4.2.17.5 Avoidable expenditure of ₹44.20 lakh due to rejection of existing rate contract and purchasing the same at higher rate with the same supplier in subsequent tender

The CGMSCL received (November 2016) indents for various type of drugs for the year 2017-18 which included 22,550 unit of Anti Tetanus Immunoglobulin USP (D46). After inviting tenders, CGMSCL finalised (19 July 2018) RC for Anti Tetanus Immunoglobulin with M/s Bharat Serums and Vaccines Limited (M/s Bharat Serum) at ₹ 1244.32 per unit. However, CGMSCL did not issue any PO to Bharat Serum, instead CGMSCL rejected (26 February 2019) the bid of M/s Bharat Serum after seven months of finalisation of tender by quoting the reasons as "The prices of the above products quoted by the bidders are not justified and so the above-mentioned products are rejected".

The CGMSCL further invited (28 February 2019) fresh tender (No. 41M) for procurement of Anti Tetanus Immunoglobulin. After evaluation, tender was finalised (27 September 2019) with the same firm M/s Bharat Serum at a higher rate of ₹ 1496.25 per unit and thereafter, purchased 17,826 unit at a total cost of ₹ 2.66 crore during the period from 30 September 2019 to 18 March 2020.

^(₹ 36.96 - ₹ 29.8) x 34,78,564 unit =₹ 2,49,06,518 {Rate of neighbouring State (Madhya Pradesh) has been considered}

 $^{^{24}}$ (₹ 123.09 – ₹ 116.66) x 24,80,728 = ₹ 1,59,51,081

Thus, the rejection of rates finalised for Anti Tetanus Immunoglobulin in earlier tender and finalisation of the higher rate with the same supplier in subsequent tender had resulted in avoidable extra expenditure of ₹ 44.90 lakh²⁵ to the Government.

4.2.17.6 Irregularities in purchase of Anti Rabies Vaccine

CGMSCL finalised (October 2016) the RC for Anti Rabies Vaccine (ARV) with M/s Indian Immunologicals Limited (IIL) at ₹ 122.40 per unit²⁶ for the period from 7 November 2016 to 8 May 2018 on the basis of indent of 5.88 lakh units received (October 2016) from DHS. CGMSCL had procured total 4.87 lakh unit of ARV valuing ₹ 6.02 crore during November 2016 to March 2018. However, after expiry of RC period, CGMSCL issued PO (10 May 2018) for supply of 23,151 units of ARV to IIL which was not supplied by the IIL.

CGMSCL did not invite fresh tender before the expiry of existing RC despite having demand and after lapse of the validity of existing RC, CGMSCL sought (18 June 2019) permission from the Department of Commerce and Industries, GoCG (DCI) to purchase ARV on nomination basis due to urgent requirement of ARV. The DCI allowed (5 July 2019) CGMSCL to purchase 10 lakh units of the ARV from M/s IIL. Accordingly, CGMSCL purchased 3.80 lakh units at ₹ 262.50 per unit from M/s IIL between June 2019 and January 2020.

On scrutiny of the records Audit observed the following irregularities:

(a) Avoidable extra expenditure of ₹1.67 crore due to nonplacing the PO as per the indented quantity

Audit noticed that against the indented quantity of 5.88 lakh ARVs, CGMSCL procured only 4.87 lakh unit from the M/s IIL during the contract period from 7 November 2016 to 8 May 2018. Due to non-issue of PO for the entire indented quantity, the balance quantity of ARV was procured at higher rates as discussed below:

Due to urgent requirement of ARV and stock out at CGMSCL's warehouses, HIs purchased 20,654 units of ARV valuing ₹ 70.77 lakh during 2018-19 at the average rate of ₹ 342.62 per unit through local purchase, which had resulted in avoidable extra expenditure of ₹ 0.47 crore²⁷. Audit further observed that the balance quantity of 80,653 units were purchased (June 2019 to January 2020) from M/s IIL on nomination basis at the quoted rate of ₹ 262.50 per unit which was ₹ 148.55 higher than tender rate in previous RC. This further resulted in avoidable extra expenditure of ₹ 1.20 crore on purchase of 80,653 units.

Non-issue of PO within validity period of RC despite having demand had resulted in avoidable extra expenditure of ₹ 1.67 crore²⁸.

²⁵ 17,826 x (₹ 1,496.25 - ₹ 1,244.32)

Revised from ₹ 122.40 to ₹ 113.95 per unit on the basis of observation raised by Audit regarding non-compliance with price fall clause by M/s IIL.

^{27 20,654} unit x ($\stackrel{?}{\stackrel{?}{?}}$ 342.62 $-\stackrel{?}{\stackrel{?}{?}}$ 113.95) $=\stackrel{?}{\stackrel{?}{?}}$ 47,22,950

²⁸ ₹ 0.47 crore + ₹ 1.20 crore

CGMSCL stated (December 2022) that purchase order was issued by mistake after expiry of validity of RC. Due to non-availability of RC and receipt of requirement from the user department, the same was procured on nomination basis after obtaining permission from DCI.

The reply is not acceptable as CGMSCL failed to place PO as per the requirement of HIs within the validity period of RC. As a result, the Government had to bear extra expenditure of ₹ 1.67 crore on purchase of balance unit of ARVs.

(b) Accepting the rate quoted by M/s Indian Immunological Limited without assessing its reasonability resulted in avoidable extra expenditure of ₹1.53 crore

Audit observed that DCI had permitted CGMSCL to purchase 10 lakh units of ARV on nomination basis from M/s IIL. CGMSCL purchased total 3.80 lakh units of ARV at the quoted rate of ₹ 262.50 per unit of M/s IIL. Audit noticed that the rates were accepted without assessing the reasonability of the rates by comparing with the prevailing market rate in other States, as IIL was supplying the same drug during the same period to Tamil Nadu Medical Services Corporation Limited at lower rate of ₹ 207.90 per unit. This resulted in purchase of ARVs at higher rate and consequently there was avoidable extra expenditure of ₹ 1.53 crore²⁹.

(c) Deviation from indented variant resulted in avoidable extra expenditure of ₹1.95 crore

The CGMSCL had finalised (February 2020) the rate contract for ARVs (Purified Chick Embryo Cell – D42A) with M/s Chiron Behring Vaccines Private Limited on single tender basis for drug code D42A at ₹ 296.10 per unit and purchased 4.53 lakh units with total value of ₹ 13.42 crore.

Audit observed that DHS and DME had demanded 6,00,000 and 83,000 units respectively of ARV (cellular culture – D42) for the year 2019-20. However, the CGMSCL invited (28 November 2019) tender for another variant i.e., purified chick embryo cell (D42A) by modifying the indented variant of the DHS and DME, which was costlier than the cellular culture (D42). Both variants are used in the treatment of dog bites. This has resulted in finalisation of tender of ARV (purified chick embryo) of costlier variant involving extra expenditure of ₹ 1.95 crore.

It is also worthwhile mentioning that M/s IIL had offered (February 2020) to supply ARVs at ₹ 253.05 per unit before finalisation of tender. As the DCI had permitted to purchase 10 lakh unit of ARVs from M/s IIL on nomination basis and out of 10 lakh unit, CGMSCL had purchased 3,80,000 units. Accordingly, CGMSCL could have purchased the balance quantity (6.20 lakh units) from M/s IIL at its quoted rate of ₹ 253.05 per unit. This further resulted in avoidable extra expenditure of ₹ 1.95 crore³⁰ in comparison to rate offered by M/s IIL.

²⁹ $(3,80,000-1,01,307) \times (₹262.50-₹207.90)$

³⁰ 4,53,170 unit X (₹ 296.10 – ₹ 253.05)

CGMSCL stated (December 2022) that due to non-receipt of any bid for cellular culture variant in past seven tenders, CGMSCL had invited bids for other variants of purified chick embryo because both the variants are used for same purpose.

Reply is not acceptable because CGMSCL did not assess the financial implications before change of the variant from cellular culture to purified chick embryo. Further, it had been procuring the cellular culture variant since inception. Moreover, the same variant was also procured by the Medical Corporations of other States *viz*. Tamil Nadu, Rajasthan and Gujarat. CGMSCL also ignored the fact that M/s IIL was ready to supply ARV (cellular culture) at lower rate.

4.2.18 Irregular purchase of drugs amounting to ₹23.98 crore from the blacklisted firms

The terms and conditions of the tender stipulated that where product(s)/suppliers is blacklisted in any other State or by a Central Agency after the submission/opening of the bid/award of contract, the product(s)/bidder/firm will be liable for blacklisting/rejection/termination/cancellation of contract/PO/LOI.

Audit observed (May 2022) that CGMSCL had finalised the tenders with nine suppliers³¹, which were blacklisted by the other Government agencies at the time of finalisation of the tenders or at the time of issuing of the POs to them. CGMSCL procured drugs worth ₹ 23.98 crore from nine blacklisted suppliers, as detailed in the *Appendix - 4.10*, which was not only irregular but also resulted in extension of undue benefit to the suppliers. Out of these nine suppliers, six were backlisted due to quality issues. Procurement of drugs from the suppliers whose products have quality issues may lead to serious health and fatality issues to the intended users.

Audit also noticed that at the time of bidding, two bidders³² were blacklisted by other Government agencies. However, they had furnished false undertaking along with the tender documents to the effect that they were not blacklisted by any other Government agencies, which also made them liable for blacklisting. Despite submission of false undertaking, CGMSCL did not take any action viz., forfeiture of EMD, SD/PG, blacklisting etc., against these bidders as per the terms and conditions of the tender.

4.3 Quality Assurance

The CGMSCL had established a Quality Control Section to ensure quality of procured drugs. The drugs are quarantined in the warehouses of CGMSCL till the test reports are received from empaneled laboratories. Drugs which pass the quality tests are distributed to the HIs and the drugs which fail the quality control checks (Not of Standard Quality – NSQ) are returned to the suppliers.

³² Ciron Drugs and Pharmaceuticals Pvt Ltd, Unicure India Pvt. Ltd

M/s Saar Biotech, M/s Kwality Pharmaceuticals Pvt. Ltd., Celon Laboratories Limited, Ciron Drugs and Pharmaceuticals Pvt Ltd, Unicure India Pvt. Ltd, Syndicate Pharma, M/s Nestor Pharmaceuticals Ltd, Goldwin Medicare Limited, Cipco Pharmaceuticals

If the supplied product is declared NSQ, the concerned supplier must replace the consignment within 30 days after declaring NSQ and deposit penalty at the rate of 20 *per cent* of NSQ stock. In any case, if NSQ stock is not lifted within 30 days, a demurrage charge at the rate of 0.1 *per cent* per day subject to maximum of six *per cent* is also levied against the supplier apart from the penalty.

In this connection Audit observed the following:

Non-replacement of NSQ drugs by the suppliers and non-levy of penalty of ₹ 1.69 crore and demurrage charges ₹ 24.60 lakh against such default suppliers

Audit observed that during the period from 2016-22, CGMSCL declared 383 batches of various types of drugs valuing ₹ 8.48 crore supplied by various suppliers as NSQ. Further, the suppliers did not lift the NSQ drugs worth ₹ 4.10 crore for replacement within stipulated time of 30 days. Audit further observed that CGMSCL did not take any effective step for replacement of NSQ drugs and neither recovered the penalty of ₹ 1.69 crore nor recovered the demurrage charges of ₹ 24.60 lakh from the defaulting suppliers. This had resulted in extension of undue financial benefit of ₹ 1.93 crore to the suppliers who supplied the sub-standard quality of drugs and failed to replace them.

The Government stated (December 2022) that process of recovery from the suppliers who have not replaced the NSQ drugs, is under progress.

4.3.2 Distribution of the Not of Standard Quality (NSQ) drugs to the healthcare institutions

Audit observed that during the period 2016-22, 129 batches of various drugs, which were issued to HIs by CGMSCL, were re-tested in empaneled laboratories and all these 129 batches were found to be NSQ. Despite declaring NSQ, CGMSCL did not take any step to recall these NSQ drugs. Possibility of distribution of such NSQ drugs to the patients cannot be ruled out.

The Government stated (December 2022) that drugs are issued to HIs only after quality check from the authorised laboratories. It was further stated that if the drugs are retested and found NSQ, then the same were kept on hold in DPDMIS software. Therefore, the question of issue of NSQ drugs does not arise.

The reply is factually incorrect because 129 batches of these drugs were issued and the same were not recalled from the HIs even after being found to be NSQ and the same were shown as distributed in the DPDMIS system.

Case Study

CGMSCL finalised (June 2018) the tender (tender no. 02/SP/2017-18) for Omeprazol 20 mg + Domperidon 10 mg (Drug Code SP1717) with M/s Maan Pharmaceuticals Limited, Mehsana, Gujarat at ₹ 11.09 per unit and procured (May 2019) 5.20 lakh units with total value of ₹ 57.72 lakh. As per the clause 9.2 of the tender document, if the sample is declared to be "Not of Standard Quality" or spurious or adulterated or misbranded, such batch/ batches will be deemed to be rejected goods.

Audit observed that drug supplied by M/s Mann Pharmaceuticals were sent to empaneled laboratory for testing. As per the test report, the instant drug SP-1717 did not conform to the standard of IP 2018 and was declared (September 2019) "Misbranded" by the testing laboratory. Therefore, this drug was required to have been replaced by the supplier. On the contrary, and in violation of tender terms and conditions, the CGMSCL accepted all such batches of instant drug SP-1717 after obtaining (April 2020) opinion from the Controller, Food and Drug Administration, Chhattisgarh.

This had resulted in irregular purchase of misbranded drugs valuing ₹ 57.72 lakh and extension of undue financial benefit to M/s Mann Pharmaceuticals.

4.4 Inventory and Warehouse Management

4.4.1 Inventory Management

4.4.1.1 Management of stock of fast-moving drugs

The CGMSCL issues drugs to various HIs through its drug warehouses. The drugs stored in the warehouses are distributed to the public/ patients by the HIs on the basis of the doctor's prescription. Therefore, it becomes essential for CGMSCL to adopt the scientific inventory management of the drugs, which includes the identification of fast moving drugs, slow moving drugs, non-drugs, fixation of minimum level, re-order level, maximum level of drugs, assessment of lead time for supply and placement of PO by assessing the future requirement on the basis of previous consumption pattern and current stock at warehouses and HIs of any particular drug.

The GoCG directed (June 2013) CGMSCL to maintain buffer stock of the EDL drugs at its warehouses for three months requirements. It also directed for placement of advance PO for procurement of drugs for the requirement of next two months. In addition, DHS identified 142 types of most essential drugs i.e., fast moving drugs which are regularly prescribed by the doctors to the patients.

Audit observed that CGMSCL did not maintain the stock of fast-moving essential drugs in any of the five test checked warehouses³³ and essential 128 drugs under 30 categories were stock out for the period ranging between 1 day and 1826 days.

Due to stock out of fast-moving drugs, the HIs had to arrange these drugs through local purchase at higher rates or patients had to purchase them at their

³³ Ambikapur, Durg, Bilaspur, Jagdalpur and Raipur

own cost. Thus, the very purpose of formation of CGMSCL was defeated as it failed to provide the essential drugs to the HIs.

4.4.2 Expiry of drugs

Audit observed that huge quantities of medicines get expired every year in the warehouses of CGMSCL. The value of expired drugs during the period 2016-17 to 2021-22 is given in *Table - 4.15*:

Table - 4.15: Year wise value of expired drugs during 2016-17 to 2021-22

Year	Value of expired medicines (₹ in crore)
2016-17	0.40
2017-18	0.43
2018-19	14.47
2019-20	12.48
2020-21	3.24
2021-22	2.61
Total	33.63

(Source: Data furnished by CGMSCL)

Further, in test checked seven HIs³⁴ and implementing units, Audit observed that under 95 categories, 1,19,372 number of drugs and consumables had expired during the period 2018-21. Few instances of expiry of drugs are discussed as follows:

4.4.2.1 Placement of purchase order without assessment of current stock and consumption trend resulted in expiry of drugs – ₹9.53 crore

Audit observed that before placing the purchase order, the CGMSCL did not assess the consumption pattern of previous year, available stock and future requirement, which was one of the main reasons for expiry of drugs. Instances of drug expiry are discussed below:

(i) Vitamin B12 injection

CGMSCL received (January 2016) an indent for 45.56 lakh units from DHS for procurement of Vitamin B12 injection (D526) which was revised (March 2016) to 46.63 lakh units.

Audit observed (December 2021) that CGMSCL procured 54.91 lakh units of Vitamin B12 injection costing ₹ 5.16 crore from two suppliers³⁵ upto April 2017 as against the indented quantity of 46.63 lakh units without any further indent from DHS/DME. CGMSCL placed POs for the entire quantity of drug between November 2016 and April 2017 despite availability of stock in the warehouse and HIs. As a result, total of 16.64 lakh units of Vitamin B12 injection worth ₹ 1.56 crore expired between November 2018 to January 2019.

Expiry of 16.64 lakh units of Vitamin B12 injection indicates the system irregularity in placing PO to vendors, as detailed in *Table - 4.16*:

³⁵ Kwality – 37.56 lakh and Alpha – 17.36 lakh at the rate of ₹ 9.39 per unit

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CHC: Dondi, Dondilohara, Arang, Tilda, Chhindgarh, Konta and CMHO Kondagaon

Table - 4.16: Details of POs issued for Vitamin B12

Sl No.	PO Number	Date	Vendor	PO quantity	Receipt Quantity	Date of receipt	Drugs Receipt value (₹)
1	Drug Cell/16- 17/18600648	26/11/2016	Kwality	6,74,800	6,74,800	29-12-2016 to 10-01-2017	63,36,372
2	Drug Cell/16- 17/18600826	08/12/2016	Kwality	10,35,000	10,34,775	25-01-2017 to 06-03-2017	97,16,537
3	Drug Cell/16- 17/18600851	16/12/2016	Kwality	10,49,400	10,49,238	09-03-2017 to 06-04-2017	98,52,345
4	Drug Cell/16- 17/18700901	05/01/2017	Alpa.	10,35,000	9,17,912	17-02-2017 to 11-04-2017	86,19,194
5	Drug Cell/16- 17/18700913	07/01/2017	Alpa	8,18,100	8,17,606	27-03-2017 to 27-05-2017	76,77,320
6	Drug Cell/17- 18/18600097	29/04/2017	Kwality	10,00,000	9,96,975	05-06-2017 to 05-09-2017	93,61,595
	Т	'otal		56,12,300	54,91,306		5,15,63,363

(Source: Compiled from records furnished by CGMSCL)

As against this, the stock position of the drug at the end of each month during December 2016 to May 2017 was as detailed in *Table - 4.17*:

Table - 4.17: Closing stock of Vitamin B12 drug during December 2016 to March 2019

Month	Opening Stock of month	Receipt during the month	Total Issue during the month	Closing stock of the month
Dec-16	0	2,17,430	0	2,17,430
Jan-17	2,17,430	8,00,825	500	10,17,755
Feb-17	10,17,755	7,54,072	84,200	16,87,627
Mar-17	16,87,627	18,13,417	1,65,015	33,36,029
Apr-17	33,36,029	5,41,841	1,18,065	37,59,805
May-17	37,59,805	3,16,856	79,290	39,97,371
Mar-18	39,96,579	2,77,760	1,38,880	41,35,459
Mar-19	15,34,430	91,940	45,970	15,80,400

(Source: Compiled from records furnished by CGMSCL)

It could be seen from the *Table - 4.16 and 4.17* that CGMSCL did not assess the current stock vis-à-vis the consumption pattern for previous year (94,280 unit) before procurement of vitamin B12 injection due to which stock level kept increasing and peaked during March 2018. In the instant case, CGMSCL despite availability of 33.36 lakh units of drugs in stock as on 31 March 2017, placed further orders to vendor for supply of 10 lakh units of this injection. Hence, purchase of additional 10 lakh unit of Vitamin B12 Injection worth ₹ 93.39 lakh was unwarranted, which ultimately resulted in expiry of Vitamin B12 Injection valuing ₹ 1.56 crore.

The CGMSCL stated (January 2020) that 54.91 lakh units of Vitamin B12 Injection (D526) were purchased against the indent of 57.68 lakh units for the years 2016-17 and 2017-18. The CGMSCL further stated that drugs were procured as per the AIs received from the user Departments. When the HIs don't send indent, drugs are not issued, and thus the drugs get expired after lapse of time for which CGMSCL is not responsible.

The reply is not acceptable because CGMSCL had procured the drugs in excess of requirement on the basis of unrealistic indent, which ultimately resulted in expiry of drugs valuing ₹ 1.56 crore. Further, after receipt of new indent for the year 2017-18, the indent of previous year i.e., 2016-17 became null and void.

(ii) Cetirizine syrup and Amoxicillin powder

Audit noticed that procurement of Cetirizine Syrup (D583) and Amoxycillin Powder for Oral Suspension IP (D30) were made on the basis of quantity indented by the Directorates without assessing actual requirement based on consumption pattern and availability of current stock and consumption trend, which ultimately resulted in expiry of these drugs worth ₹ 2.35 crore, as detailed in *Table - 4.18*:

Table - 4.18: Details of indent quantity, previous consumption, actual purchase, stock position and expired quantity in respect of Cetrizine syrup

Drug Name:	Drug Name: Cetrizine Syrup IP -5mg/5ml									
Drug Code:	Drug Code: D583									
Total indent	Previous year consum- ption	Date of purchase	Purchased quantity	Rate (₹ per unit)	Name of supplier	Stock position as on PO date	Expired quantity	Value of expired drugs (₹)		
		03-01-2017	41,64,039	12.55	Karnataka	0	13,71,477			
2,09,08,350	23,55,304	30-03-2017	10,40,064	12.55	Antibiotics Pharmaceuticals limited	38,34,639	(expired during 31/12/2018 to 31/01/2019)	1,72,12,036		
20908350	23,55,304		52,04,103					1,72,12,036		
Drug Name:	Drug Name: Amoxycillin Powder for Oral Suspension IP									
Drug Code:	D30									
		17-06-2016	61,860	9	Yelluri Formulation Pvt. Ltd.	34,170				
		17-06-2016	41,240	9			6,99,504			
26,37,170	1,53,280	12-09-2016	2,45,800	9		71,135	(expired during:30/06/2018	6,29,5536		
		30-11-2016	10,38,104	9	Bharat Parenterals Ltd	2,61,639	to 31/10/2018)			
		08-12-2016	1,08,00,00	9	I montain Bu	22,9444				
	(09-12-2016	1,69,500	9		2,26,284				
26,37,170	1,53,280		26,36,504				6,99,504	6,29,5536		

(Source: Compiled from records furnished by CGMSCL)

The CGMSCL stated that as per the AIs received from the user Departments, CGMSCL procured the drugs. After procurement of drugs, it was issued to HIs on the basis of their monthly indents. When the HIs did not send indent, drugs were not issued and thus the drugs expired after lapse of time.

The reply is not acceptable because CGMSCL has failed to assess the current stock and consumption trend before placement of purchase order, which ultimately resulted in expiry of drugs.

(iii) Caffeine citrate injection

CGMSCL received (February 2019/May 2020) indent for various drugs from DME which included 1,540 units and 87,512 units of Caffeine Citrate 20 mg/ml Injection (Drug Code D574) for the year 2019-20 and 2020-21

respectively. Accordingly, CGMSCL finalised (13 February 2020) the RC with M/s Maan Pharmaceuticals Limited, Mehasana, Gujrat (M/s Maan Pharma) at the rate of ₹ 504 per unit and purchased (May and June 2020) 87,500 units valuing ₹ 4.41 crore.

Audit observed (February 2021) that consumption of Caffeine Citrate injection in earlier years of 2017-18 and 2018-19 was only 1200 and 1000 units respectively, however, this consumption trend was not considered while issuing the purchase order for the forthcoming years and CGMSCL issued the purchase order for the whole indented quantity. The details of purchases made; quantity issued to hospitals are given in *Table - 4.19*:

Value of Year Receipt Issue Balance Excess **Opening** Bal (as on quantity purchase **Total** Date of QC receipt/ **Issued** QC issue/ purchase (₹) 1 April of for the receipt to HIs receipt inter inter FY) vear against warehouse warehouse PO receipt 04/01/20 2019-20 170 1000 220 830 310 250 08/01/20 12/5/20 2020-21 87,500 26,233 61,317 61,267 3,08,78,568 250 4.750 4.950 24/6/20 2021-22 61,317 402 56,931 392 4,396 (expired)

Table - 4.19: Details of drugs purchase and issued to HIs

(Source: Compiled from information furnished by CGMSCL)

As could be seen from the above table, 4,396 units of caffeine citrate injection valuing ₹ 22.16 lakh had expired at CGMSCL's warehouses. It is worthwhile to mention that the caffeine citrate injection is used in the treatment of pre-mature baby and there were 2,380 cases of pre-mature delivery in HIs of Raigarh district during 2019-20. However, GMC Hospital, Raigarh raised the indent of 80,000 unit i.e., about 34 times higher than the total reported cases during previous year. Further, out of total purchased quantities of 87,500 units, GMC Hospital, Raigarh had lifted 75,570 unit and issued them to wards in bulk quantities³⁶. However, scrutiny of records at ward level revealed that only 4,766 unit were utilised and remaining 70,804 units of drugs valuing ₹ 3.57 crore expired in wards of HIs of Raigarh district. This has ultimately resulted in expiry of drugs valuing total ₹ 3.79 crore³⁷.

(iv) Factor IX injection

The DME made indent for 3,800 units of Factor IX Complex (Coagulation factors II, VII, IX, X) Injection Dried (Factor IX injection, drug code D215³⁸) for the year 2020-21 which included 3,600 units for GMC Hospital, Raigarh. CGMSCL finalised (6 December 2019) the RC with M/s Baxalta Bio Science India Private Limited, Gurgaon (M/s Baxalta) and procured 2,190 units valuing ₹ 1.97 crore at the rate of ₹ 9,009 per unit.

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³⁶ 20,000 unit in December 2021; 5000 unit in January 2022 and 24134 units in February 2022

^{4,396} unit expired at CGMSCL's warehouse and 70,804 unit expired at GMCH, Raigarh (total quantity 75,200 x ₹ 504 per unit = ₹ 3.79 crore)

³⁸ It is used for treatment of hemophilia A

Audit observed that the quantity of Factor IX injection requisitioned by DME in the indents of previous years from 2016-19 ranged between 110 and 300 units per annum. The GMC Hospital, Raigarh had lifted 1,644 units costing ₹ 1.48 crore during September 2020 to October 2021 just before expiry of drugs (approaching expiry within 31 days to 251 days) and the same were issued to wards in bulk quantities. As per the information provided by the GMC Hospital, Raigarh, out of total 1,644 units, only 90 units were used and balance 1,554 units valuing ₹ 1.40 crore had expired at ward.

Further, out of balance quantity of 546 injections, 496 were issued under push mechanism without any demand from HIs of DHS/ DME and 50 injections expired in the warehouse of the CGMSCL. Thus, total 1,604 units of Factor IX injection (73 *per cent* of procured quantity) valuing ₹ 1.45 crore had expired (May 2021 and November 2021) resulting in loss to the Government exchequer.

(v) Nenotaxel 300 mg injection

CGMSCL finalised (26 May 2020) the rate contract with M/s Fresenius Kabi Oncology Limited at the rate of ₹ 11,760 per unit on the basis of indent of 2000 units for Nenotaxel 300 mg Injection (Drug Code D699) received from the DME for the year 2020-21 and purchased (December 2020) 2,000 units valuing ₹ 2.35 crore under tender no. 56M (R). Out of this, 325 units stock valuing ₹ 38.22 lakh had expired in September 2022. The details of purchase, issues to HIs and balance are given in the *Table - 4.20*:

Value of Year **Opening** Total Date of QC receipt/ Issued OC issue/ Balance Value of Excess receipt receipt drug (₹) inter wareinter quantity purchase against house for the purchase (₹) ware-PO receipt house vear issue 2020-21 2000 1/12/20 -2,35,20,000 0 580 45 1,375 1,420 1,66,99,200 11/12/20 2021-22 1,375 0 12 902 0 485 0 10 475 2022-23

Table - 4.20: Details of purchase, issued to HIs and balance Drugs

(Source: Compiled from information furnished by CGMSCL)

Injudicious decision of placing PO for the entire quantity instead of staggered purchase in a phased manner led to non-utilisation of drugs within the shelf life. Moreover, no minimum level/ buffer stock for various essential drugs has been fixed by the CGMSCL which led to stock out of some of essential drugs on one side and expiry of other drugs on the other side. This indicated lack of effective system of placing procurement order and deficient inventory management system as explained in succeeding paragraphs.

It is also evident from the above cases that Department did not adopt any effective system for assessment of requirement on the basis of past consumption and available stock at the time of finalisation of AI which ultimately resulted in expiry of drugs.

Expiry of drugs valuing ₹3.27 crore due to acceptance of drugs with less than 80 per cent shelf life

As per the terms and conditions of the tender, the drugs supplied must have a shelf life of 80 *per cent* or more at the time of delivery. Essential medicines having shelf life of 60 to 80 *per cent* will be accepted only after the approval of MD, CGMSCL, if the supplier/agency/manufacturer submits notarised undertaking that it will replace the expired medicine free of cost with fresh batches.

Audit observed that in 1,156 instances, CGMSCL, in violation of tender conditions, had received various drugs with shelf life less than 80 *per cent* at the time of delivery. Of these, in 57 instances, the drugs had shelf life less than 60 *per cent*. No reasons were found on the records for accepting such drugs. As a result, various drugs valuing ₹ 3.27 crore supplied by 36 suppliers had expired in the warehouses, as detailed in *Appendix - 4.11*. Out of this, CGMSCL got expired drugs valuing ₹ 3.49 lakh only replaced from two suppliers. After being pointed out by the Audit, CGMSCL directed (05 April 2022) eight suppliers to replace the nine drugs valuing ₹ 1.71 crore which had expired during the period between June 2019 and March 2022. However, these eight suppliers did not replace the drugs (December 2022) but no further action was taken by CGMSCL to either get the remaining expired drugs valuing ₹ 1.52 crore replaced or recover this amount from the suppliers resulting in undue benefit to supplier.

The Government assured (December 2022) that recovery will be made from the supplier's bill.

4.4.3 Expiry of reagent kits worth ₹ 2.32 crore at HIs

In 10 test checked HIs, Audit observed that reagent kits valuing ₹ 2.32 crore supplied by CGMSCL had expired during the period 2020-22 as they could not be utilized due to non-availability of technical manpower and equipment, as detailed in the following *Table - 4.21*:

S. **Particulars of Reagent** Total nos. **Total value** Name of HIs N. of reagent of reagent (₹ in crore) 1 TISAB II reagent kit for 200 1.33 CMHO, Surajpur Fluoride Ion Meter HBA1C reagent kit for 84 0.33 CMHO: Bilaspur (36 nos.), HBA1CAnalyzer Korea (38 DH. nos.) Kondagaon (11 nos.) 3 CBC reagent kit for 151 0.39 CHC: Kota (13 nos.), Ratanpur **Blood Cell Counter** (7 nos.), Kharora (20 nos.), Tilda (8 nos.) Arang (93 nos.) and Bhaiyathan (10 nos.) Fluoride Calibration 100 0.27 CMHO, Surajpur Standard kit 2.32 **Total**

Table - 4.21: Details of expiry of reagent kit

(Source: Compiled from information furnished by CGMSCL)

The huge number of expired kits in the above HIs reveals that the Department is not having any mechanism for assessing the requirement of reagent kits by considering available equipment and manpower in the respective HIs.

4.4.4 Deficiencies in push mechanism

To overcome the problem of non-lifting of drugs by the HIs, CGMSCL started (August 2015) push mechanism under which the near expiry drugs were issued to the facilities without any requisition so that the loss could be minimised in this account. This practice got validated by the Department of Health, GoCG when it directed (September 2019) to introduce the 'Push Mechanism' for supply of these drugs to the HIs which were not lifted by HIs on time. Accordingly, CGMSCL formally introduced (October 2019) the 'Push Mechanism'.

Audit observed that CGMSCL was issuing the drugs to the HIs under the push mechanism at the near expiry time of these drugs (viz. approaching the expiry within 2 to 3 months) in bulk, without assessing the consumption pattern of drugs at HIs. Audit noticed 3,528 instances (during 9 November 2016 to 20 January 2021) when 179 drugs valuing ₹ 4.87 crore were issued to HIs just two months before expiry. In some cases, Audit observed that after receipt of such drugs in bulk, the drugs store of the HIs immediately issued the same to the OPDs and IPDs for onwards distribution to patients. As a result, the concerned drug was out from the stock of CGMSCL's warehouses as well as from HIs stores consequently escaping the channel of recording the expiry in the DPDMIS.

Moreover, one of the disadvantages of push mechanism was that drugs accepted with less than prescribed shelf-life escaped replacement by the supplier. In absence of audit trail of drugs that were issued to the patient in the HIs, Audit could not ascertain whether the drugs issued under push mechanism were actually utilised or not. Some instances are as follows:

- (i) CGMSCL issued (January 2019) 17.23 lakh bottles of Multivitamin Syrup with expiry date of February 2019 to the HIs which was more than the average monthly issue quantity of 2.26 lakh bottles. After receipt, the HIs also issued 16.03 lakh bottles to OPD/ IPD in January 2019 for onward distribution to patients. This indicates issue of drugs to HIs just before their expiry.
- (ii) CGMSCL under push mechanism issued (28 February 2022) 500 SKU³⁹ of Ribociclib 200 mg Tab (drug code SP19541) to GMCH, Raipur just one month before its expiry on 31 March 2022.
- (iii) 26 types of drugs valuing ₹ 6.16 lakh was supplied by the CGMSCL to four GMCHs⁴⁰ just before they approached their expiry dates (expiry dates approaching within one to three months) and the same was issued to wards without any demand, which subsequently expired at the wards level.

³⁹ Stock-keeping Unit

⁴⁰ CIMS Bilaspur, GMCH Jagdalpur, GMCH Rajnandgaon and GMCH Raipur

Case Study

CGMSCL received (8 October 2020) 1,143 SKU⁴¹ of Ribociclib 200 mg Tab (drug code SP19541) having 74 *per cent* shelf-life and valuing $\stackrel{?}{\underset{?}{?}}$ 2.20 crore at its warehouse, with the approval of MD.

As per the online system for issue of drugs, the system blocks the issue of drugs which have expiry period less than one month. During the year 2020-21, CGMSCL issued 52 SKU⁴² to the HIs. Similarly, during the year 2021-22, CGMSCL issued 753 SKU to the HIs under push mechanism, which included the issue of 500 SKU to GMCH, Raipur on 28 February 2022 i.e., just one day before being blocked for issue. As the expiry of this drug was within one month, the GMCH, Raipur returned 407 SKU to the warehouses on 22 April 2022. Thus, total 745 SKU of Ribociclib 200mg Tab (drug code SP19541) valuing ₹ 1.44 crore expired at CGMSCL's warehouse.

Further, as per the online system of CGMSCL, these drugs were not appearing in list of expired drugs despite the fact that 745 SKU of the expired drug were lying at warehouse in Raipur.

After being pointed out by the audit, CGMSCL got replaced (July 2022) the expired drugs with new batches and stated (November 2022) that supplier had replaced 743 SKU with new batches and cost recovery of 2 SKUs will be made from the supplier's bill.

4.4.5 Warehouse Management

For warehouse management, the Drugs and Cosmetic Rules, 1945 provides essential framework for storage of drugs and medicines viz., facility of good storage conditions (cleanliness, maintenance of ideal temperature, humidity), proper housekeeping and pest control, sufficient racks/bins, separate space for rejected or recalled drugs, safe and secured area for highly hazardous, poisonous and explosive materials, adequate fire protection system, regular check for spillage, breakage, leakage of containers, etc.

CGMSCL has 16 warehouses in the State to ensure easy availability of drugs to the HIs within the minimum possible time. Out of 16 warehouses, Audit selected five warehouses i.e., Raipur, Durg, Bilaspur, Jagdalpur and Ambikapur for detailed scrutiny. During inspection of five selected Drug Warehouses of CGMSCL, Audit observed the following:

4.4.5.1 Standard Operating Procedures (SoP)

CGMSCL had not prepared any SoP for operation and maintenance of its warehouses. As a result, there were many instances of violation of the Drugs and Cosmetic Rules and other Statutory requirements which are discussed in the subsequent paragraphs.

4.4.5.2 Improper lighting arrangement

Audit observed that in three warehouses viz., Raipur, Bilaspur and Jagdalpur, more than 50 *per cent* of lights were not working. Streetlights installed inside

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One Stock Keeping Unit (SKU) = 1×21 tablet

⁴² Including issue to QC wing

the campuses of Bilaspur, Durg and Jagdalpur warehouses were also not found in working condition.

The Warehouse Incharges stated (March 2022) that the proposal for replacement of light was pending with CGMSCL's Head Office since August 2020.

4.4.5.3 Temperature Management in Warehouse

Audit observed that drugs were not grouped in families on the basis of the temperature viz., drugs requiring sub-zero degree Celsius temperature were to be stored in deep freezers and some specific drugs require cold room with temperature ranging between 2 and 5 degree Celsius.

The details of the cold storage facilities available in five test checked warehouses are as given in the *Table - 4.22*:

For 2-8 degree Celsius temperature For subzero degree Celsius Name of the temperature Warehouse Cold **Ice Linked** Linear **Deep Freezer** Room Refrigerator Refrigerator Not Available 1 1 1 Ambikapur 1 1 1 Not Available Durg 1 1 3 Not Available Bilaspur 0 1 1 Not Available Jagdalpur 0 2 Not Available Raipur

Table - 4.22: Details of temperature facilities in the warehouses

(Source: Information furnished by CGMSCL)

In all five test checked warehouses, there was no arrangement for storage of the drugs requiring minus degree Celsius and therefore, such drugs were not stored in the warehouse. For instance, the COVID-19 vaccine which required to be stored in -20 degree Celsius were kept in the medical college attached hospitals.

Further, the cooling system installed in warehouse at Durg was not functional since installation (2017) and at Jagdalpur since February 2022 due to burning of power supply cable while at Raipur the cooling system was not installed in one out of two storerooms, as shown in the following *Photographs: 6 to 9*:







8. Date: 12 April 2022 (Store 2)

9. Date: 12 April 2022 (Store 2)

No cooling arrangement at Store 1 and Store 2 of the Raipur warehouse

CGMSCL, in its 32nd Board Meeting decided (5 October 2019) for installation of cooling system in its four drug warehouses at Raipur, Durg, Bilaspur and Ambikapur at a tentative cost of ₹ three crore. However, after lapse of more than 30 months, no progress in this regard was achieved by CGMSCL.

It indicates the casual approach of the management as the air-cooling system is not working in all the test checked warehouses. On date of inspection (March/April 2022) the maximum temperature recorded in all the test checked warehouses ranged between 31 and 39 degrees Celsius.

4.4.5.4 Poisonous medicines and hazardous chemicals

As per the Drug and Cosmetics Rules, 1945, the highly hazardous, poisonous and explosive materials such as narcotics, psychotropic drugs and substances presenting potential risks of abuse, fire or explosion shall be stored in safe and secure areas. Audit observed that there was no separate space for storage of poisonous and hazardous chemicals such as phenyl, bleaching powder, Anti-snake venom etc., in three⁴³ warehouses. Further, even though there was separate space for storage of poisonous and hazardous chemicals in the Jagdalpur Warehouse, Polyvalent Anti-snake Venom and pesticide were kept in the warehouse along with general medicine.

4.4.5.5 Management of expired Drugs and NSQ drugs

Audit observed that there was a separate space/ room for storage of expired and NSQ drugs in all the warehouses except Durg Warehouse. However, due to space constraints and large quantity of expired drugs, the same were stored along with the usable drugs in the warehouses.

4.4.5.6 Other miscellaneous issues

Audit observed that facilities for storage of drugs was not adequate/ proper due to which drugs/ medicines were stored on the floors without racks. Generator system under power back-up facilities was not available in four out of five warehouses. No pest control arrangements were made in three warehouses. Though the fire extinguishers were available, they were found

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Durg, Bilaspur and Raipur

expired since 2021 in three out of five warehouses. Further, automatic fire detection and alarm system were not installed in all the test checked warehouses. The physical verification and inspection of warehouses, as prescribed in the norms, was also not conducted. Barcode scanning of drugs/medicine packets was not being done due to non-availability of barcode scanners.

The Government stated (December 2022) that it had requested (September 2022) the Food and Drug Administration Department for inspection of all warehouses and had also requested to provide the report within seven days for taking corrective action.

Reply substantiates the fact that CGMSCL had not developed any effective warehouse management.

4.5 Distribution of drugs by HIs

4.5.1 Availability of essential drugs at healthcare institutions

As per IPHS 2012 norms, 493 drugs, lab reagents, consumables and disposables under 20 different categories should be available in a DH and 176 drugs under three different categories in CHC.

Audit observed that Department had identified (November 2021) 272 drugs, lab reagents, consumables and disposables under 30 different categories for DH and 149 drugs under 21 categories for CHC from Chhattisgarh Essential Drug List 2021, which should be available in DH and CHC respectively.

Availability of drugs, lab reagents, consumables and disposables under 30 categories in the test checked DHs is detailed in *Table - 4.23* as under:

Table - 4.23: Availability of Drugs, Lab Reagents, Consumables and Disposables in test-checked DHs

Sr. No.	Categories	Number of drugs		Avai	ilability	in test-c	hecked	DHs	
1.00		required as per EDL 2021	DH, Surajpur	DH, Baikunthpur	DH, Sukma	DH Bilaspur	DH Raipur	DH Kondagaon	DH Balod
1	Anaesthetics	6	0	5	4	3	2	2	6
2	Analgesics, Antipyretics, Nonsteroidal Anti-Inflammatory Medicines	14	6	12	10	8	10	8	14
3	Antiallergics And Medicines Used In Anaphylaxis	9	2	9	7	5	5	7	8
4	Antidotes And Other Substances Used in Poisoning	6	1	3	1	2	1	3	5
5	Anticonvulsants/Antiepileptics	10	3	8	7	6	3	4	10
6	Anti Infective, Anti Bacterial, Anti Fungal & Anti Biotics Drugs	23	13	22	19	14	11	12	22
7	Anti Viral And Nucleoside Reverse Transcriptase Inhibitors-TART (To Be Provided By NACO)	13	0	1	0	3	0	1	7
8	Anti Malarial & Anti Filarials	13	10	13	13	13	1	11	13
9	Antimigraine Medicines	3	1	0	0	0	1	1	3
10	Antineoplastic,Immunosuppressives,	21	4	3	18	2	1	1	18

Sr. No.	Categories	Number of drugs		Avai	ilability	in test-c	hecked	DHs	
110.		required as per EDL 2021	DH, Surajpur	DH, Baikunthpur	DH, Sukma	DH Bilaspur	DH Raipur	DH Kondagaon	DH Balod
	Medicines For Palliative Care								
11	Antiparkinsons Medicines	1	0	0	0	0	0	0	1
12	Medicines Affecting the Blood	8	7	8	8	8	6	7	8
13	Blood Products and Plasma Substitutes	3	1	0	1	1	1	1	2
14	Cardiovascular Medicines	17	9	10	11	10	12	11	17
15	Dermatological Medicines (Topical)	11	9	9	6	8	4	8	10
16	Disinfectants And Antiseptics- Consumables	6	6	5	5	6	5	3	6
17	Diuretics	5	5	4	4	2	2	0	4
18	Gastrointestinal Medicines	19	16	17	18	16	14	15	19
19	Insulins & Other Antidiabetic Agents	9	8	5	2	7	5	4	7
20	Immunologicals	3	3	3	3	3	3	3	3
21	Muscle Relaxants	2	1	0	0	0	2	0	2
22	Ophthalmological Preparations	10	2	2	3	3	7	8	8
23	Oxytocic And Antioxytocics	8	5	5	4	2	4	5	8
24	Psychotherapeutic Medicines	12	12	6	2	3	1	1	10
25	Medicines Acting on The Respiratory Tract (Bronchodilator)	9	6	6	5	4	7	6	8
26	Solutions Correcting Water, Electrolyte And Acid-Base Disturbances	10	7	6	9	10	7	6	10
27	Vitamins And Minerals	12	9	11	9	11	9	7	11
28	Ear, Nose and Throat Preparations	2	1	0	1	0	1	0	2
29	Specific Medicines for Neonatal Care	4	0	0	1	1	2	0	4
30	Medicines for Disease of Joints	3	1	2	0	0	1	0	3
/C	Total	272	148	175	171	151	128	135	246

(Source: Information furnished by District Hospitals)

Color Code:

(in per cent)

Availability range						
75 to 100	50 to 75	25-50	0 – 25			

As could be seen from the above table that none of the DHs maintained the required 272 drugs and availability of drugs ranged from 128 drugs (DH, Raipur) to 246 drugs (DH, Balod). Further, 103 essential drugs under 10 categories at were stock out in the test checked DHs.

Similarly, availability of drugs, lab reagents, consumables and disposables under 21 categories in the test checked CHCs are detailed in *Table - 4.24*:

Table - 4.24: Availability of Drugs, Lab Reagents, Consumables and Disposables in test-checked CHCs

			Availability in test-checked CHCs													
Sl No	Category	Number of drugs required as per EDL 2021	Arang	Tilda	Dondi	D. Lohara	Makdi	Vishrampuri	Konta	Chhindgarh	Janakpur	Chirmiri	Bhaiyathan	Bishrampur	Kota	Takhatpur
1	Anesthetics	2	2	2	2	2	1	1	1	0	1	1	2	2	0	1
2	Analgesics, antipyretics, nonsteroidal anti- inflammatory medicines	9	8	8	9	9	7	6	6	7	5	5	8	7	6	8
3	Antiallergics and medicines used in anaphylaxis	6	6	6	6	6	6	6	6	5	6	4	3	6	5	6
4	Antidotes and other substances used in poisoning	3	1	2	3	3	1	3	2	1	2	1	2	3	1	1
5	Anticonvulsants/antie pileptic	8	4	7	8	8	5	5	3	2	1	1	2	3	3	5
6	Anti-infective, anti- bacterial, anti-fungal & anti biotics drugs	15	12	12	13	15	14	14	10	9	11	5	6	12	8	10
7	Anti-malarial & anti filarials	12	9	10	12	12	7	12	12	11	12	5	10	4	7	9
8	Medicines affecting the blood	8	6	7	8	8	6	7	6	4	5	5	5	7	6	7
9	Cardiovascular medicines	15	11	11	14	15	11	12	9	5	5	2	7	9	6	7
10	Dermatological Medicines (Topical)	8	5	7	8	8	5	6	8	4	5	2	3	6	6	8
11	Disinfectants and antiseptics-consumables	5	4	3	5	5	2	4	5	3	3	3	5	5	4	4
12	Gastrointestinal medicines	17	14	17	17	17	14	16	15	13	13	8	13	17	15	16
13	Insulins & other antidiabetic agents	4	3	2	4	4	2	4	3	3	2	1	1	3	2	3
14	Immunologicals	3	3	3	3	3	3	3	2	3	3	3	3	3	2	2
15	Ophthalmological preparations	3	1	2	3	3	1	1	1	1	1	0	0	2	1	1
16	Oxytocic and antioxytocics	4	1	3	4	4	3	3	3	3	1	1	1	3	2	4
17	Psychotherapeutic medicines	4	1	2	4	4	2	1	2	0	0	0	4	1	0	2
18	Medicines acting on the respiratory tract (bronchodil- ator)	7	3	5	7	7	1	4	4	3	4	0	2	5	1	3
19	Solutions correcting water, electrolyte and acid-base disturbances	5	4	5	5	5	5	4	5	5	5	4	4	4	4	5
20	Vitamins and Minerals	10	7	8	10	10	6	9	8	5	6	5	6	8	9	9
21	Ear, Nose and Throat preparation	1	1	1	1	1	0	1	0	0	0	0	0	0	1	1
	/6	149 rce: Informati	106	123	146		102			87	91	56	87	110	89	112

(Source: Information furnished by test checked CHCs)

Color Code:

Availability range

75 to 100

50 to 75

25-50

0-25

As could be seen from the above table that none of the CHCs maintained the required 149 drugs except CHC Dondilohara and availability of drugs in other CHCs ranged from 56 drugs (CHC, Chirmiri) to 146 drugs (CHC, Dondi) against the required 149. Further, 39 essential drugs under five categories were stocked out in test checked CHCs.

4.6 Prescription audit

Prescription Audit is a facility level review exercise conducted periodically for reviewing the facility's prescriptions.

As per directions (7 June 2013) of the GoCG, the Prescription Audit was to be done by the Drugs and Therapeutics Committee (DTC) to be established in all Government DHs, College associated hospitals. The DTC was also to review the results of the Prescription Audit and recommend the same to the State Government.

Audit observed that DTC existed only in DKSPGI, however it has not conducted the prescription audit since inception (October 2018). Similarly, no DTC was constituted in other GMC hospitals and DHs of Balod, Bilaspur, Korea and Kondagaon. In remaining three DHs of Raipur, Sukma and Surajpur, though DTC was formed, but Prescription Audit was conducted only in DH, Sukma (December 2021) and DH, Raipur (September and October 2019), and no Prescription Audit was conducted in DH, Surajpur.

Thus, Prescription Audit has not been conducted in any GMC hospitals, DH, Surajpur and DKSPGI so far. In absence of Prescription Audit, it could not be ensured whether the doctors are writing the prescription as per the norms.

Test check of four GMC hospitals and seven test checked DHs revealed lack of details of ailment, proper dosages of medicines and duration of dosages in the prescription of patients as detailed in *Table - 4.25*:

Name of the GMC hospital	Prescription test checked	Handwriting in legible in capital letters (in <i>per cent</i>)	Medicines prescribed by generic names (in per cent)	Medicine Schedule/ doses clearly written (in per cent)	Medicines advised are available in the dispensary
GMCH					
DKSPGI	30	3	26	70	26
Ambikapur	51	2	86	100	67
Bilaspur	32	13	77	72	58
Jagdalpur	47	23	58	87	38
Rajnandgaon	56	9	95	100	31
Raipur	152	0	92	98	66
District Hospita	als				
Balod	127	0	90	88	83
Bilaspur	29	0	88	55	94
Kondagaon	25	0	76	68	92
Baikunthpur	22	0	86	23	95
Raipur	52	0	94	100	91
Sukma	34	0	86	100	91
Surajpur	51	0	99	88	98

Table - 4.25: Deficiencies noticed in prescription slips

4.7 Maintenance of medical equipment

4.7.1 Discrepancies in the annual maintenance contract of equipment

CGMSCL invited (28 December 2017) tender for hiring a service provider for maintenance of biomedical equipment installed at various healthcare facilities in the State. After evaluation of bids, the tender was finalised (May 2018) with M/s Mediciti Health Care Services Private Limited Hyderabad (M/s Medicity) at the rate of 6.80 *per cent* of estimated value of inventory of ₹ 98 crore, which comes to ₹ 7.86 crore per year (including taxes). As per terms and conditions of tender, the scope of work included maintenance of equipment, setting up customer care centre to register the fault, recruitment of trained manpower and providing equipment management information system. Accordingly, M/s Medicity had prepared equipment profile and status by tagging all the equipment available in various health facilities.

On scrutiny of the records Audit observed the following:

➤ M/s Medicity identified 44,345 equipment, as detailed in *Table - 4.26*:

Table - 4.26: Statement showing equipment quantity vis-à-vis value

lar of equipment | Number of equipment | Amount of equipment (₹ in crore) (per in facilities

Particular of equipment valuing	Number of equipment in facilities	Amount of equipment (₹ in crore) (per cent)
Below ₹1 Lakh (minor)	41,037	62.05 (32.74)
Above ₹1 Lakh	3,308	127.46 (67.25)
Total	44,345	189.51 (100)

(Source: Compiled from information furnished by CGMSCL)

Audit observed that list of equipment mentioned in *Table - 4.26* were not verified by the Department.

Audit had shortlisted the equipment costing above ₹ one lakh from the database of M/s Medicity and conducted joint physical verification of these equipment in test checked HIs. Audit observed that in three DHs, 61 equipment⁴⁴ valuing ₹ 3.09 crore were kept idle and 53 equipment⁴⁵ valuing ₹ 1.60 crore were not found in the premise of DHs.

CGMSCL stated (November 2022) that it was the responsibility of the head of the HIs to ensure keep the equipment in working condition.

4.8 Procurement under COVID-19

The GoCG has constituted (28 March 2020) a State Level Committee⁴⁶ (COVID Committee) for COVID-19 related procurement. The objective of the committee was to finalise the immediate and emergency procurement of drugs, consumables and equipment required for the safety, treatment and

28 equipment worth ₹ 172.14 lakh in DH Bilaspur, 15 equipment worth ₹ 57.89 lakh in DH Baikunthpur (Korea) and 18 equipment worth ₹ 78.5 lakh in DH Kondagaon

45 30 equipment worth ₹ 80.77 lakh in DH Bilaspur, 07 equipment worth ₹ 28.70 lakh in DH Baikunthpur (Korea) and 16 equipment worth ₹ 50.29 lakh in DH Kondagaon

Committee comprises 10 members - senior officials of State Government departments and experts

prevention from COVID-19 pandemic under Rule 10 of the Chhattisgarh State Stores Purchase Rule, 2002.

In the first COVID Committee meeting, mandate of the COVID Committee was decided by its members that procurement of drugs, consumables and equipment relating to COVID-19 will be done by the CGMSCL for limited tender period of three days. The procurement would be done on the basis of the recommendation of the committee after assessing the requirement of Health Department and its approval by the Cabinet. In the first meeting (29 March 2020) of the COVID Committee, it was also decided that the requirements/ indent of supplies for COVID-19 shall be placed by the Health Department before the COVID Committee for recommendation after assessment of demand. The Committee had finalised procurement mostly through GeM, short-term online tenders and existing RCs of CGMSCL. The procurement model of the Committee is explained in *Chart – 4.2:*

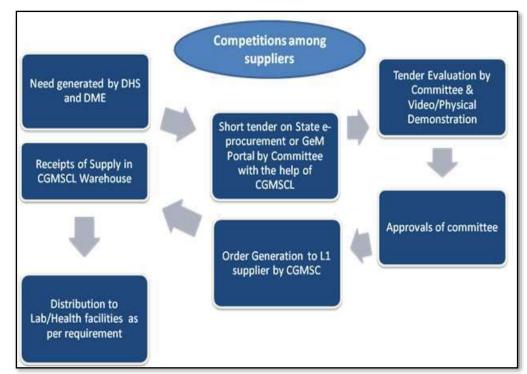


Chart – 4.2: Procurement model of the state level committee

(Source: Compiled from the records furnished by COVID Committee)

During March 2020 to November 2021, CGMSCL had issued 340 POs for 131 items of equipment worth ₹ 142.73 crore and 385 POs for 84 items of drugs, medicines and consumables worth ₹ 860.03 crore related to COVID-19 to the suppliers.

The irregularities noticed during scrutiny of records of purchase of supplies related to COVID-19 are discussed in succeeding paragraphs.

- 4.8.1 Finalisation of tender with the ineligible bidders resulted in irregular purchases valuing ₹ 22.98 crore and consequent undue financial benefit to the suppliers.
- (i) Irregular procurement of RT-PCR kits of ₹13.85 crore from ineligible bidders

CGMSCL received (May 2020) indent from DME for procurement of RT-PCR Test Kits. Accordingly, CGMSCL invited (16 June 2020) tender for 3.50 lakh RT-PCR Kits. As per eligibility criteria, the bidder should be a manufacturer or 100 *per cent* subsidiary of the manufacturer. The authorised distributor for imported products was also eligible to participate in the bidding. Further, the quantity could be split and may be distributed among maximum three successful bidders at a 60:40 (for top two bidders) or 50:30:20 (for top three bidders) ratio in case of exigencies.

After evaluation of bid, the COVID Committee finalised (15 July 2020) the rate of ₹ 571.20 per kit. Accordingly, CGMSCL purchased (July 2020 to October 2020) 2,425 units⁴⁷ at the cost of ₹ 13.85 crore from M/s PD Enterprises and 2,941 units⁴⁸ at the cost of ₹ 16.12 crore from M/s SD Biosensor Healthcare Private Limited.

Audit observed that M/s PD Enterprises participated in the tender on behalf of M/s Huwel Lifesciences Private Limited, which had manufacturing factory in Hyderabad, Telangana. M/s PD Enterprises declared itself authorised distributor in affidavit submitted to CGMSCL along with the bid document. However, as per the terms of the tender, authorised distributors were eligible to participate in the tender for imported items only. Ignoring this aspect, M/s PD Enterprises was declared technically qualified. This had resulted in irregular finalisation of tender with ineligible bidder i.e., M/s PD Enterprises and consequent extension of undue financial benefit of ₹ 13.85 crore by procurement of RT-PCR kits.

(ii) Irregular finalisation of tender with the ineligible bidder and irregular purchase valuing ₹ 9.13 crore from M/s Unity Healthcare

The COVID Committee received (September 2020) indent from DHS for procurement of PPE coverall (breathable fabric) for COVID-19. Accordingly, CGMSCL invited (15 September 2020) a short-term tender for the procurement of six lakh PPE coverall.

As per the eligibility criteria of the tender, the bidder should have experience of selling 60,000 similar items to any State Government/GoI Institution. Further, as per the tender, if L2 and L3 bidders agree to supply the materials at L1 rates, the scheduled requirements can be split among L1, L2 and L3 bidders in ratio of 50:30:20.

In response to the tender, 14 bidders participated in the tender and after evaluation of bids, COVID Committee finalised (25 September 2020) the lowest price of ₹ 304.45 per unit quoted by M/s P.D. Enterprises and accordingly, CGMSCL counter offered to other bidders. In response, M/s BMA Prints Private Limited and M/s Unity Health Care accepted (September 2020 and October 2020) the counteroffer. The CGMSCL procured three lakh PPE kits each worth

One unit contains 96 kit

⁴⁷ One unit contains 100 kit

₹ 18.26 crore from M/s Unity Healthcare and M/s BMA Prints Private Limited, as detailed in *Table - 4.27*:

Table - 4.27: Details of purchase order issued to the suppliers in respect of PPE Coverall (Breathable fabric) under tender No. 67832

Sl	l Purchase Order no. Date		Quantity (Nos.)	Last MRC ⁴⁹ Date	Rate (₹ per kit)	PO value (₹)
	BMA PRINTS PRIVATE LIMI					
1	Drug Cell/20-21/3BMA01122	25-September-2020	50,000	10-Nov-20	304.45	1,52,22,500
2	Drug Cell/20-21/3BMA01143	10-October-2020	1,00,000	29-Nov-20	304.45	3,04,45,000
3	3 Drug Cell/20-21/3BMA01299 28-November-2020		1,50,000	12-Jan-21	304.45	4,56,67,500
	Total (A)		3,00,000			9,13,35,000
	Unity Healthcare					
1	Drug Cell/20-21/3UNITY01123	29-September-2020	50,000	15-Nov-20	304.45	1,52,22,500
2	Drug Cell/20-21/3UNITY01144	10-October-2020	1,00,000	08-Dec-20	304.45	3,04,45,000
3	Drug Cell/20-21/3UNITY01301	28-November-2020	1,50,000	15-Feb-21	304.45	4,56,67,500
	Total (B)	3,00,000			9,13,35,000	
	Grand Total (A+B)	6,00,000			18,26,70,000

(Source: Compiled from information furnished by CGMSCL)

Audit observed M/s Unity Health Care did not fulfill the eligibility criteria as it had furnished copy of POs of only 46,872 kits as against the required 60,000 kits to Government institutions. The COVID Committee however allowed purchase of three lakh PPE kit valuing ₹ 9.13 crore from this firm. This has resulted in irregular finalisation of tender with ineligible bidder and irregular purchase of PPE kits worth ₹ 9.13 crore.

It was further observed that the CGMSCL had not placed any PO to L-1 bidder i.e., M/s P.D. Enterprises for which no justification/ reasons were found recorded.

- 4.8.2 Avoidable extra expenditure due to finalisation of tenders at higher rates ₹22.54 crore
- (i) Avoidable extra expenditure of ₹ 9.33 crore due to purchase of Truenat Combo Kit from the distributor

For testing of COVID-19, Truenat COVID-19 Combo Kit-E gene and Orfla gene (Truenat Combo Kit) were required. The DHS furnished (7 December 2020) indent for five lakh Truenat Combo Kit to CGMSCL required for next three months. In this connection, M/s Molbio which was an OEM, offered (10 December 2020) the rate of ₹ 1,120 per kit for Truenat Combo Kit along with the free kits if PO is placed directly to it (not through any distributor/GeM) till 31 December 2020. The schedule of placement of PO for getting free kits is detailed in *Table - 4.28*:

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⁴⁹ Material Receipt Certificate

Table - 4.28: Statement showing schedule with condition of placement of PO

Sl. No.	Number of kit of purchase order	Percentage of free kit	Number of kits including free kits
I.	1,00,000	10%	1,10,000
II.	1,00,000 – 3,00,000	15%	1,15,000 – 3,45,000
III.	3,00,000 - 5,00,000	20%	3,60,000 - 6,00,000

(Source: Compiled from records furnished by COVID Committee)

As detailed in *Table - 4.29*, the effective rate of Truenat Combo kit was ₹ 933.33 per kit for PO quantity of three lakhs and more subject to PO being placed directly to M/s Molbio before 31 December 2020. As per the offer, CGMSCL was required to place PO for indented quantity of five lakh kits in the manner as detailed in *Table - 4.29*:

Table – 4.29: Details of purchase order to be placed by CGMSCL

Indented quantity (DHS)	Orders to be placed for the quantity	Purchase order value at the rate of ₹ 1120 per kit (₹)	20 per cent free quantity as per the offer of M/s Molbio	Total quantity receivable against the PO	Effective rate per kit (₹)
1	2	3	4 (2 x 20%)	5	6 (3/5)
5,00,000	4,16,667	46,66,67,040	83,333	5,00,000	933.33

(Source: Compiled from records furnished by CGMSCL)

However, the COVID Committee did not consider the offer of M/s Molbio without recording any reasons/ justification and instead, the CGMSCL invited (11 December 2020) tender (no. 917404) through GeM. The COVID Committee finalised (18 December 2020) the rate of ₹ 1,120 per kit with M/s Virtuoso Medico Infratech Private Limited, which had participated in the tender as distributor of M/s Molbio and purchased (24 December 2020 and 8 April 2021) five lakh Truenat Combo Kit worth ₹ 56.00 crore.

Thus, decision of the COVID Committee for the purchase the Truenat Combo Kit through GeM from distributor of M/s Molbio by ignoring the best offer of direct purchase from M/s Molbio was not in the best financial interest of GoCG. Had the Truenat Combo Kit been purchased directly from M/s Molbio, the free kits could have been received in terms of concessional offer. Accordingly, the effective rate would be ₹ 933.33 per kit.

This has resulted in avoidable extra expenditure of ₹ 9.33 crore⁵⁰ on purchase of five lakh Truenat Combo Kit from the distributor and consequent extension of undue financial benefit to it.

(ii) Procurement of RAT kits at higher rates due to stringent tender conditions resulted in avoidable extra expenditure of ₹13.21 crore

The COVID Committee received (8 April 2021) indent from DHS for the procurement of 18 lakh Rapid Antigen detection Test (RAT) kits for requirement of next three months. Accordingly, based on the recommendation of the COVID Committee, CGMSCL invited (12 April 2021) a short-term

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⁵⁰ ₹ 56.00 crore – ₹ 46.67 crore

tender for procurement of 22 lakh RAT kits⁵¹. The CGMSCL also issued Tender Amendment Notice on 13 April 2021 and changed the clause of supply schedule as follows:

Existing condition	Revised condition
Supply of kits within 15 days from the date of purchase order	Minimum one lakh test kit per day from day one to day 10 and entire quantity is to be supplied within 15 days from the date of purchase order.

In response to the tender, six bids were received. After evaluation, the COVID Committee qualified (19 April 2021) three bids for all other technical points, however only one bidder i.e., M/s SD Biosensor Private Limited agreed to supply as per the supply schedule. Accordingly, the single price bid was opened on the same day by CGMSCL. The bidder quoted the rate of ₹ 89.60 (including GST) per test kit. The COVID Committee approved the proposal. Accordingly, CGMSCL procured 33 lakh RAT kits valuing ₹ 25.30 crore from M/s SD Biosensor, as detailed in *Table - 4.30*:

Table - 4.30: Statement showing details of PO placed for RAT kit

PO date	Quantity	Rate per kit including GST (₹)	Amount (₹)	Remarks
19 April 2021	10,00,000	89.60	8,96,00,000	
13 May 2021	12,00,000	78.40	9,40,80,000	The supplier suo motto
5 July 2021	11,00,000	63.00	6,93,00,000	reduced the price of kits.
Total	33,00,000		25,29,80,000	

(Source: Compiled from records furnished by CGMSCL)

Audit observed that the amendment of supply schedule by CGMSCL from supply of kits within 15 days from the date of PO to one lakh kit per day from day one to day 10 and the entire quantity within 15 days was too stringent and restrictive. As a result, out of six bids received, only one bidder accepted the supply schedule and qualified the tender. This consequently resulted in finalisation of tender for procurement of RAT kits at exorbitant higher rate of ₹ 89.60 per kit, which was 245 per cent higher in comparison to previous finalised (February 2021) RC with M/s Oscar Medicare Private Limited and M/s Trivitron Healthcare Private Limited which offered the rate of ₹ 36.62 per kit for 15.84 lakh quantity (27 February 2021 to 13 April 2021) valuing ₹ 5.80 crore and having supply schedule from 7th day to 15th day from date of PO, which were actually supplied till 24 May 2021. Here, it is pertinent to mention that the prices of RAT kits were in decreasing trend as was evident from the fact that in November 2020 the CGMSCL procured the kits at ₹ 304.60 per kit, in January 2021 the rate was ₹ 150.08 per kit and from February 2021 to March 2021 the rate of RAT kit was ₹ 36.62 per kit. Further, in subsequent tenders which were finalised on 17 August 2021, the COVID Committee obtained much lower rates which was ₹ 10.80 per kit only (583 per cent lower than the previous purchase price) and procured 24 lakh kits during August 2021 to October 2021. It is worthwhile to mention

As per the tender terms and conditions 50 *per cent* more quantities could be purchased in case of exigency in addition to original requirement of 18 lakh kits.

that in the State, one lakh RAT based testing was never conducted in a single day during the period April 2021 to August 2021.

After the COVID Committee had finalised the tender for 22 lakh RAT kits, CGMSCL had split the requirements into two separate POs. The POs were then issued on 19 April 2021 (10 lakh units) and 13 May 2021 (12 lakh units). The CGMSCL thus, had extended undue benefit to M/s SD Biosensor because as per the terms and condition, entire quantity was to be supplied within 15 days from the date of issue of PO. By issuing two separate POs, CGMSCL had allowed M/s SD Biosensor extra time for supply of RAT kit.

Application of stringent tender conditions and ignoring the decreasing trend of the rates, the COVID Committee finalised the rate of RAT kits on higher side which had resulted in avoidable extra expenditure of ₹ 13.21 crore⁵².

4.8.3 Procurement without the recommendation of COVID committee – ₹23.13 crore

As per mandate of the COVID Committee, it recommends for procurement of drugs, consumables and equipment relating to COVID-19 after assessment of requirement/indent furnished by the Health Department. It was also decided in the first meeting of COVID Committee that all the requirements/indent of COVID-19 should be placed before COVID Committee for assessment.

Audit observed that in six instances, recommendation of the COVID Committee was not obtained before inviting tender nor the bids received were placed before COVID Committee prior to placing the purchase order to three different suppliers, as detailed in the following *Table - 4.31*:

Table - 4.31: Details of purchase by CGMSCL without approval of COVID Committee

SI	Particulars of items	Indented quantity (no.) and Date of Indent	PO no. and date	Purchase quantity (no.)	Name of the supplier	Total Value (₹ in lakh)
1	Truenat Machine	30 (13 June 2020)	EQP/114/20-21, (16/06/2020)	30		436.80
2	Trueprep auto transport	40,000 (6 July 2020)	EQP/157/2020-2021, (17/08/2020)	40,000	M/s Molbio Diagnostic Private Limited	80.64
3	Pasture pipette	42,500 (06 July 2020)	EQP/158/20-21, (17/08/2020)	42,500		12.54
4	Rapid Antigen Detection	Nil (no indent was received for purchase of	Drug Cell/20-21/ 3MDSPL/01293 (19-11-20)	5 lakh (supplied only 2 lakh)	M/s Mylab Discovery Solutions Pvt. Ltd.	609.20
5	Test Kits	additional quantity of five lakh)	Drug Cell/20-21/ 3D2001483 (14-01-21)	3 lakh	M/s SD Biosensor	450.24
6	RT-PCR Kits			67,200	Healthcare Private Limited	724.04
			Total			2,313.46

(Source: Compiled from records furnished by CGMSCL)

 $^{^{52}}$ ₹ 25,29,80,000 – (₹ 36.62 X 33 lakh kits)

This has resulted in irregular purchase of COVID related items valuing ₹23.13 crore without the recommendation of COVID Committee.

4.8.4 Finalisation of higher rate of RNA Extractor Machine resulted in avoidable extra cost of ₹24.41 lakh

As per the mandate of the COVID Committee, it should recommend for procurement of drugs, consumables and equipment relating to COVID-19 by assessing the reasonability of rate by comparing the rates of item with other States, GeM, Central Supplies Organisation etc., for ensuring economy of the rates.

Audit observed that based on indent (29 April 2020) and directions (8 May 2020) of the COVID Committee, CGMSCL invited (9 May 2020) online tenders for Automatic RNA Extractor.

The COVID Committee, after evaluation (6 June 2020) of bids, had recommended the L1 rate of ₹ 37.89 lakh per unit for Automatic Nucleic Acid Extraction System (48 tube model no. - Genetix Purfier 96) quoted by M/s Genetix Biotech Asia Private Limited, New Delhi by comparing the rate with purchases made by other States/GeM. Accordingly, CGMSCL issued (5 December 2020) the PO for four numbers of Automatic Nucleic Acid Extraction System.

Audit observed that while comparing the rate of other institutions the COVID Committee found that the same item and same model was available at GeM for ₹ 31.79 lakh. However, ignoring the available lower rate, the COVID Committee recommended to finalise the tender at ₹ 37.89 lakh which was ₹ 6.10 lakh higher (about 19 *per cent* higher) than the GeM rate. This has resulted in avoidable extra cost of ₹ 24.41 lakh.

4.8.5 Undue benefit to supplier by not levying penalty for default in supply of drugs

CGMSCL invited (12 April 2021) tender for procurement of Favipiravir 200 mg (indent quantity – 51 lakh tablet) and 400 mg tablet (indent quantity - 26 lakh tablet) based on indent of DHS. After assessment of reasonability of the rates, the COVID Committee recommended (27 April 2021) the price quoted by M/s Synokem Limited for both the variants. Accordingly, the CGMSCL placed (3 May 2021) two POs to M/s Synokem Limited for purchase of 51 lakh tablets of Favipiravir 200 mg and 26 lakh tablets of Favipiravir 400 mg at the rate of ₹ 9.40 and ₹ 18.424 per tablet respectively for a total of ₹ 9.58 crore⁵³, which was to be supplied within 15 days from the date of supply order i.e., on or before 18 May 2021.

Audit observed that M/s Synokem Limited did not supply any quantity of Favipiravir 200 mg tablet against PO quantity of 51 lakh tablet whereas in case of Favipiravir 400 mg tablet, only one lakh tablets against 26 lakh PO quantity was supplied (4 June 2021).

Despite default in supply of the most essential drugs for COVID-19, the CGMSCL did not levy penalty at the rate of 20 *per cent* of un-supplied quantity on M/s Synokem Limited as per the terms and conditions of tender

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^{53 ₹ 4.79} crore for Favipiravir 400 mg + ₹ 4.79 crore for Favipiravir 200 mg

and thereby had extended undue financial benefit of \mathbb{T} 1.88 crore⁵⁴ to the supplier. CGMSCL also not initiate any action to blacklist the supplier from participating in the future tenders.

4.8.6 Irregularities in procurement of equipment and consumables by DME

The DHS provided (March and June 2020) ₹ 6.00 crore to DME for management of COVID-19 under State Disaster Relief Fund (SDRF) for purchase of equipment, PPE kit etc. The DME formulated (23 March 2020) a committee of five members under the Chairmanship of the Director, Medical Education and purchased equipment and consumables valuing ₹ 3.71 crore. Audit observed the following shortcomings:

(i) Undue favour to firm by purchase on nomination basis in violation of manual of procurement, 2017

Rule 4.3.3 of the CGSPR stipulates that all purchase valuing more than ₹ one lakh is to be made through open tendering process except in case of procurement of proprietary item.

Audit observed that in contravention of Rule 4 of the Store Purchase Rules, Director, DME, Raipur (Shri S.L. Adile) had purchased various equipment viz, fowler bed, video laryngoscope, manual ICU bed, swab sticks, Bed side lockers and casualty/dead body bags costing ₹ 63.63 lakh directly from M/s B.M. Swastik, Raipur on nomination basis without following the tendering process. It was also noticed that the promoter of B.M. Swastik is Shri Sankalp Adile, son of Chairman of the committee. Further, there was a conflict of interest between the Chairman of the Committee and the supplier (M/s B.M Swastik Raipur), hence, the DME should have reclused himself from the procurement process.

Thus, purchase of ₹ 63.63 lakh without following tendering process from the close relative of the Chairman of procurement committee besides being irregular was also extension of undue financial benefit to the supplier.

The DME stated that all purchases were made after obtaining approval of directorate level purchase committee in accordance with Disaster Management Rules. The purchase committee comprises of DME and other specialists.

The reply is not acceptable because despite having prior information about the relationship between the Director, DME and the owner of the supplier, the fact was overlooked while placing orders to the supplier.

(ii) Irregular procurement of Liquid Medical Oxygen (LMO) tanks

Audit observed that CGMSCL had procured (April 2021) LMO tanks valuing ₹ 1.71 crore and supplied to four GMCHs⁵⁵ for setting up of oxygen generation plants and cryogenic liquid oxygen tanks. However, the user department i.e., DME had obtained the required administrative sanction for

Un-supplied value ₹ 9.40 crore x 20 per cent

⁵⁵ GMC Ambikapur, Jagdalpur, Raigarh and Rajnandgaon

this only in March 2022 from GoCG. Thus, purchase of LMO tanks without administrative approval was irregular.

(iii) Idling of Liquid Medical Oxygen tanks

During COVID-19 pandemic, medical oxygen proved to be the most important lifesaving element. Most HIs depend on external sources that produce and transport medicinal oxygen as and when demanded by them. The intense outbreak of COVID-19 forced the authorities to revisit the production and supply challenges. In the wake of sudden spike in medical oxygen demand and its consequences, MoHFW stressed (May 2021 and July 2021) on the importance of dedicated oxygen generation plants to make hospitals self-sufficient and in addition, setting up of Liquid Medical Oxygen (LMO) storage tanks to step-up emergency preparedness.

During joint physical verification (July 2022) of selected GMCHs, it was noticed that none of the LMO tanks had been operationalised even though payment of ₹ 87.78 lakh was released to firms. These tanks were only erected in GMCHs Jagdalpur and Rajnandgaon and kept idle in GMCH Ambikapur.

As the LMO tanks were either not installed or were non-operational for seven to 10 months without any reason, therefore, the objective of providing uninterrupted oxygen supply was not ensured.

Similarly, scrutiny of records at DKSPGI it was noticed that:

- Idling of LMO tank installed in DKSPGI hospital premises: Cryogenic LMO tank (12KL) worth ₹ 38.11 lakh was supplied by CGMSCL (PO date 24 April 2021). The equipment was installed in hospital premises and testing/ demonstration was done in January 2022 without connecting it with the main oxygen pipeline of the hospital and thus, it was kept idle since its supply.
- Supply of Low-quality oxygen: Pressure Swing Adsorption (PSA) plant of 1500 LPM capacity worth ₹ 2.90 crore was installed in DKSPGI on September 2018, the warranty of which expired in March 2022. However, AMC/ CMC has not been done by the DKSPGI, Raipur till date (June 2022). The display on machine shows that the purity of oxygen was less than 35 per cent and maintenance was required but no action was taken in this regard. According to WHO guidelines on PSA, only high-quality medical grade oxygen (90 per cent to 96 per cent) should be given to patients.

Government stated (April 2023) that LMO tank would be installed in new building, which is under construction in GMC Ambikapur. CGMSCL had been directed to complete installation work of LMO tank in DKSPGI Raipur. Instructions had been issued to GMCs for early installation of the LMO tanks.

Non utilisation of Automatic Nucleic Acid Extraction Systems valuing ₹ 2.77 crore due to non-availability of reagent

RNA extraction machines are used to automate the process of RNA extraction from cell or tissue samples and widely used in RTPCR test for detection of COVID-19.

Audit observed that the CGMSCL issued (June and August 2020) purchase order to the supplier Genetix Biotech Asia Private Limited for supply and installation of four Automatic Nucleic Acid Extraction System 96 Channel 48 tube in four⁵⁶ Medical Colleges worth ₹ 1.79 crore. The equipment were supplied and installed at GMC hospitals between July and August 2020 with warranty upto August 2025. It was noticed that these equipment were not utilised for one to 14 months due to non-availability of extraction kits.

Similarly, in two Medical Colleges⁵⁷ three RNA extraction machines supplied by ICMR, UNICEF and purchased locally were installed between September 2020 and July 2021 but could not be utilised after installation, as detailed in *Table - 4.32*:

Table - 4.32: Details of supply and installation of RNA extraction machine

Name of GMC	Supplier	Date of receipt	Date of installation	Value (₹in lakh)	Idle since
GMC	CGMSCL	July 2020	July 2020	44.71	May 2021
Bilaspur	UNICEF donated	July 2021			from the date of supply
GMC Ambikapur	CGMSCL	July 2020	July 2020	44.71	March 2021
GMC Jagdalpur	Local purchase	Not mentioned	21 September 2020	55.48	since its installation
	ICMR	July 2020	04 September 2020	42.19	since its installation
GMC Rajnandgaon	CGMSCL	July 2020	July 2020	44.71	February 2021
GMC Raipur	CGMSCL	August 2020	August 2020	44.71	December 2020
Total				276.51	

(Source: Compiled after joint physical verification of GMCH Bilaspur, Ambikapur, Jagdalpur, Rajnandgaon and Raipur)

Thus, due to deficient planning and lack of coordination between GMCs and CGMSCL, above equipment could not be put to use for want of extraction kit resulting in non-utilisation of the same during COVID-19 pandemic.

The Government stated (April 2023) the CGMSCL to maintain uninterrupted supply of the extraction kit.

4.8.8 Availability of ventilators in test checked districts

Details related to ventilators received and distributed to various HIs under COVID-19 in the test checked district are given in the following *Table - 4.33*:

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Ambikapur, Bilaspur, Rajnandgaon and Raipur

Bilaspur and Jagdalpur

Table - 4.33: Ventilators received in the test checked district

District	Total number of ventilators supplied to CMHO	Number of ventilators installed in time	Number of ventilators installed with delay	Range of delay in installation (day)	Number of ventilator not installed
Raipur	114	20	80	1 to 454	14
Korea	28	0	28	10 to 14	0
Balod	15	0	15	18 to 259	0
Kondagaon	18	18	0	No delay	0
Sukma	18	4	14	25 to 95	0
Surajpur	26	26	0	No delay	0
Bilaspur	30	8	22	2 to 17	0
Total	249	76	159	1 to 454	14

(Source: Information furnished by CMHO)

As could be seen from the above table that total 249 ventilators were supplied to seven test checked districts. Out of this, only 76 ventilators were installed on time and 159 ventilators were installed with delay ranging from 1 to 454 days. It was further observed that in Raipur district 14 ventilators have not been installed till May 2023 though they were supplied between 1 April 2021 and 20 August 2021.

4.9 Availability of drugs, medicines, equipment, and other consumables in AYUSH

4.9.1 Delay in finalisation of annual indent of drugs

GoCG had entrusted the work of centralized procurement and distribution of drugs for Health Department to CGMSCL which has developed and operationalized (May 2013) DPDMIS to facilitate online indent, procurement and distribution of drugs and medicines. The Department directed (May 2016) that every year Annual Indent (AI) for drugs and consumables should be prepared by 30 September and compiled AIs should be submitted to CGMSCL by 31 October of the preceding year.

Audit observed that Directorate compiled and forwarded AIs received in offline mode to CGMSCL with delay as mentioned in *Table - 4.34*:

Table - 4.34: Statement showing delay in submission of Annual Indent

Year	Date of receipt of AI from Facilities ⁵⁸	Approval date by Directorate, AYUSH	Actual date of submission to CGMSCL	No of days taken for approval by Directorate	Delay in submission of AI to CGMSCL
(a)	(b)	(c)	(d)	e (c-b)	(f)
2017-18	23-07-16	12-09-2016	15-09-2016	51 Days	No Delay
2018-19	26-05-17	31-03-2018	31-03-2018	309 Days	151 Days
2019-20	29-11-18	08-02-2019	11-02-2019	71 Days	103 Days
2020-21	25-10-19	31-10-2019	04-11-2019	06 Days	04 Days
2021-22	30-01-21	25-02-2021	26-02-2021	26 Days	118 Days

(Source: Data furnished by Directorate, AYUSH and compiled by Audit)

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Date of receipt taken as the date of receiving AI from the last healthcare facility

Directorate took more than six to 309 days against the prescribed time of 30 days in finalisation of the AIs after receiving them from healthcare facilities. AIs of drugs were submitted to CGMSCL after 31 October every year with a delay except 2017-18, ranging from four days to 151 days. The committee formed at Directorate level to analyse the AI, forwarded the indent to CGMSCL by rationalising the demand received from healthcare facilities without any working papers or recording reasons. Moreover, Directorate and healthcare facilities failed to utilise Drug Procurement and Distribution Management Information System (DPDMIS) for indenting and distribution which could have reduced the delay in the finalisation of AI, procurement, and distribution.

GoCG replied (December 2022) that due to delay in receiving the AI from healthcare facilities and consolidation of indent at Directorate level, there was consequent in delay in forwarding the AI. Further, online software for indent is under development by CGMSCL and in future, the AI will be forwarded using the software.

The reply is not acceptable as DPDMIS has been operational since 2013 and existing AYUSH facilities were not mapped in the DPDMIS system by the Directorate.

4.9.2 Non-availability of standard equipment at Drug Testing Laboratory and Research Centre (DTLRC), Raipur

The State Government established (2001), a DTLRC for carrying out quality testing of medicines produced at Government and private pharmacies in the State. As per the operational guidelines for quality control for Ayurvedic, Siddha, Unani & Homeopathy drugs issued under NAM, 59 types of equipment are required for three sections namely chemistry (34 types), pharmacognosy (16 type) and microbiology (9 types) in DTLRC.

Audit observed that only 42 types⁵⁹ of equipment were available in the DTLRC. Further, due to lack of manpower the microbiology section was not operational and two⁶⁰ equipment were kept idle.

GoCG accepted the facts (December 2022) and stated that due to lack of technical manpower, microbiology section could not be made operational. Further, demand has been furnished to CGMSCL for procurement of the remaining equipment.

4.9.3 Shortfall in achievement of targets of production of medicines

Government Ayurveda Pharmacy (GAP) is involved in production and distribution of ayurvedic medicines in the State. Every year targets for production of drugs by GAP on the basis of annual indent received from healthcare facilities of the State are approved by the Director, Ayush.

Audit observed that GAP produced 132 solid medicines and 20 liquid medicines with shortfall in production ranging from 58 to 92 *per cent* for solid

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⁵⁹ 26 types of equipment in chemistry, 14 types of equipment in pharmacognosy and 2 types of equipment in microbiology

⁶⁰ BOD incubator and Other related Equipment and reagents

medicines and 72 to 100 *per cent* for liquid medicines during 2016-21. A total of 33 medicines worth ₹ 93.03 lakh were produced without any demand from the districts, as detailed in *Appendix - 4.12*. Further, shortfall in production of drugs against the target was more than 80 *per cent* in four out of last five years.

GoCG replied (December 2022) that due to short supply of essential raw materials by CGMSCL the desired annual targets could not be achieved by GAP.

4.9.4 Excess supply of equipment worth ₹0.75 crore

Equipment required in the healthcare facilities are supplied by CGMSCL as per the annual indent furnished by them which consists of the number and specification of the equipment required by the healthcare facilities. AI for equipment are prepared by healthcare facilities and compiled AIs are submitted to CGMSCL by Directorate, AYUSH for onward supply to the healthcare facilities.

Audit observed that in seven selected districts, 281 equipment were supplied in excess to the healthcare facilities without considering the AI, as detailed in *Table - 4.35*:

S. N. Number of Equipment of received against AI /without Indent Value of Equipment (in ₹ Cr) AI Demand Qty. AI Received Qty. **Excess Qty. supplied** 1. 207 282 75 0.19 2. 0 206 206 0.56 488 0.75 **Total** 207 281

Table - 4.35: Excess supply of equipment in selected districts during 2016-22

(Source: Data provided by selected units and compiled by Audit)

It was further observed that 69 equipment costing ₹ 0.36 crore were lying idle due to supply in excess of requirement in 29 test-checked healthcare facilities.

GoCG stated that (December 2022) equipment is supplied as per the indent raised by the facilities and due to delay in issuing work orders by CGMSCL, equipment against previous year's indent is supplied along with the current year's indent resulting in excess supply.

Reply is not acceptable as annual indents were being prepared without considering previous years supplies resulting in excess equipment worth $\mathbf{\xi}$ 0.75 crore being accepted by the healthcare facilities.

4.10	Information	Technology	System	developed	by
	CGMSCL				

4.10.1 Introduction

GoCG developed e-Procurement system in the state under mission mode project of National e-Governance Plan (NeGP) through Chhattisgarh Infotech Promotion Society (CHiPS). CHiPS implemented e-Procurement system in the State which is used by various departments for tendering purposes. Similarly, to streamline the procurement and distribution of drugs, consumables, and equipment in the healthcare system, GoCG approved (July 2012) to develop of

an Information Technology (IT) system through CGMSCL, which deals with indenting, purchase, inventory management and distribution of various drugs, consumables, and equipment etc., to all the healthcare facilities across the State.

CGMSCL being centralized procurement agency of the State initiated implementation and use of the computerized system⁶¹, as shown in *Table - 4.36*:

Table - 4.36: Statement showing the web-based application used by CGMSCL

Name of Application software	Developed by	Date of operationalization
Drug Procurement and Distribution Management Information System (DPDMIS)	CGMSCL	May 2013
Equipment Management Information System (EMIS)	CGMSCL	August 2017
Health Infrastructure Management Information System (HIMIS)	CGMSCL	December 2014
e-Procurement	CHiPS	March 2016

(Source: Data provided by CGMSCL and compiled by Audit)

DPDMIS consists of eight modules namely indent, tender & contracts, purchase order, warehouse, quality control, health facility, supplier, and finance for purchase of drugs and consumables. EMIS consists of three modules namely procurement, maintenance, and complaints for equipment. HIMIS consists of six modules namely head office, division, sub-division, sub-engineer, finance, and contractor for monitoring of construction works.

The IT audit covered the application software *viz.*, DPDMIS, EMIS and HIMIS. Audit scrutinised the manual records/files at the head office of CGMSCL and analysed data available in DPDMIS, EMIS (Oracle data dumps) using SQL queries and MS Excel.

The audit examination of the prevailing IT system has been bifurcated to evaluate general, application and output controls of the system. Audit examined whether reliable controls were in place to ensure data security and whether necessary audit trails were incorporated into the system.

4.10.2 General Controls

General Controls are the foundation of the IT Control structure. These are concerned with the general environment in which the IT systems are developed, operated, managed, and maintained. Weaknesses in the general controls noticed in Audit are discussed below.

4.10.2.1 Lack of planning in developing IT system

For development of IT system which caters to the need of the CGMSCL and user healthcare facilities, short-term and long-term plan was required to be formulated.

Accordingly, for automation of various operations of the CGMSCL such as procurement and distribution of drugs and equipment along with installation and maintenance, civil works, human resources management and financial accounting, the work of preparation of a web-based application software was

Please refer to Chart -4.1 for the process flow of procurement.

awarded (February 2013) to the M/s Board Line Computer System (BLCS), Chennai. BLCS prepared the software and handed over (2016) the system to CGMSCL only for procurement and distribution of drugs (DPDMIS). After that application system (EMIS and HIMIS) was developed by the in-house team of CGMSCL.

Audit observed that the feasibility study of the systems viz., DPDMIS, EMIS and HIMIS was performed in March 2013, August 2014 and 2016 respectively. Further, the documents related to the feasibility study were not prepared till date despite lapse of nine years from the date of feasibility study.

Further, CGMSCL failed to monitor the work after award. As a result, five modules out of eight modules were non-functional in DPDMIS and documents such as User Requirement Specifications (URS), System Requirement Specification (SRS), change management policy and manual of the IT system were not prepared by the BLCS during the execution of the work.

Additionally, parallel testing of only finance module of DPDMIS was done (February 2021) by CGMSCL at the instance of Audit and parallel testing of all the other modules was not conducted. In the absence of parallel testing, audit could not ascertain whether the various stages of process followed in online system were same as in the manual system.

CGMSCL, while developing the IT system in the organisation has developed different software and different database (i.e., DPDMIS, EMIS, HIMIS and e-Procurement) and these different databases were not interconnected. As a result, the end-to-end process of procurement, distribution to healthcare facilities and payment facility to vendors, suppliers, and financial transactions is still not fully computerized and could not be linked, as discussed in paras 4.10.3.2(C), 4.10.3.2(D), and 4.10.3.3(A).

Government replied (November 2022) that the modules developed by CGMSCL will be included in the existing SRS and URS documents and document preparation for a feasibility study of all applications is under process and would be completed by FY 2023-24. Separate manpower for conducting and documenting parallel testing will be assigned by CGMSCL. Further, all the databases will be interconnected in future as and when required.

4.10.2.2 Non-operational Integrated e-Procurement System and DPDMIS

GoCG entrusted (August 2007) Chhattisgarh Infotech Promotion Society (CHiPS) to implement a new Integrated e-Procurement System (IePS) in five⁶² Departments on a pilot basis including Department of Health.

CHiPS were to implement the eight modules namely vendor management, indent management, e-tendering, e-auctions, contract management, e-payment, accounting, and MIS for mandatorily rolling out in the five pilot Departments.

Audit observed that out of eight modules to be implemented in the IePS in Health Department, only three modules⁶³ were operational and rest of

⁶³ Vendor Management, e-Tendering, and MIS.

Health Department, Chhattisgarh State Industrial Development Corp. Ltd., Public Health Engineering Department, Public Works Department, and Water Resources Department

five modules⁶⁴ were not implemented even after Go-live⁶⁵ of application in March 2016. Further scrutiny revealed that operationalization of the remaining modules was not enforced by the Health Department.

In parallel, CGMSCL had developed (May 2013) another software i.e., DPDMIS for the same purpose and developed the eight modules⁶⁶ in the software. Out of the eight modules developed by CGMSCL, four modules⁶⁷ were overlapping with the existing IePS. However, only two modules i.e., purchase order and quality control were fully functional, and one module i.e., warehouse was partially functional and five modules i.e., indent, tender, facility, supplier, and payment were non-functional as of March 2022. Despite availability of the IePS of CH*i*PS, the CGMSCL rolled out parallel software at a cost of ₹ 49.02 lakh. However, even in this software all the modules as envisaged by CGMSCL were non-functional (June 2022). Thus, despite existence of a software another one was developed for the same purpose but both remained incomplete and hence the objective of development of an integrated software could not be achieved.

Government replied (November 2022) that e-procurement application is only used for the e-tendering process. CGMSCL has sent a letter to CH*i*PS to share detailed functionality of other modules of e-procurement.

Fact remains that despite the availability of required modules in IePS and acceptance of the same by CGMSCL, a parallel software was developed by CGMSCL.

4.10.3 Application Controls

Application controls consist of input, processing, and output controls which help to ensure rule mapping, proper authorization, completeness, accuracy, and validity of transactions.

4.10.3.1 Input controls

Input controls ensure that the data entered is complete and accurate. Input controls are those controls that are used mainly to check the integrity of data entered into a business application. Weaknesses in the input controls noticed in audit are discussed below:

(A) Failure to implement input checks in application system

The accuracy of data input in a system could be controlled by imposing computerised validity checks. Validity checks ensure that input data remains within specified parameters.

Deficiencies in input control observed in DPDMIS database are as following:

In Master table *mastitems* data, which captures data related to drugs such as drug code, drug name, strength, packing quantity, date of entry, etc., 3,417 entries were made without mentioning date and 2,546 entries were

189

Indent management, e-auctions, Contract Management, Accounting, and e-payment.

Go-live means the date on which one complete cycle of services for all modules, as requisitioned by the Department is completed.

Indent/Demand, Tender & Contracts, Purchase/Supply Order, Warehouse, Quality Control, Health Facility, Supplier Module, and Finance/Payment.

⁶⁷ Indent module, Tender & Contracts, Supplier and Finance.

- made with the same date (01.11.2018) indicating non-availability of any checks to prevent entry of backdate.
- Entry without proper approval resulted in incomplete data being captured \triangleright by the system.
- There was no field to record entry date, update date and user id in master tables (i.e., masitems, masssuppliers, masschemes, masitemcategories, and masaccyearsettings etc.) and transaction tables (i.e., soordereditems, soorderplaced, and aoccontractitems etc.).
- Twenty cases with invalid manufacturing date format and four cases⁶⁸ having the same batch number but different manufacturing dates, were accepted in DPDMIS.
- In case of six tenders⁶⁹ for equipment, purchase orders amounting to ₹ 17.92 crore were issued through DPDMIS instead of EMIS.
- As per physical records, in tender no 27M(P), total 13 contracts were executed without signature and date by CGMSCL, while contract sign date was found recorded in the system in nine cases. Further start date and end date were not recorded in manual contracts but were recorded in the system in four cases.

Further, deficiencies in input control observed in EMIS database are mentioned below:

- There were 73 and 26 cases of null data in the mandatory fields of contract_sign_date and contract_end_date respectively in the table award_of_contract.
- In EMIS, system generated purchase orders are issued to the supplier. In two tenders (tender no.44 and 53), purchase orders for equipment of ₹ 24.69 crore were issued by the system after the end of validity period⁷⁰ of contract entered with the six suppliers⁷¹ for 15 items. In absence of any checks in the system, there was delay in issue of purchase orders ranging from 184 days to 436 days after the expiry of validity period of contract (as detailed in Appendix - 4.13).

Government replied (November 2022) that a new column of entry date has been added in all master tables. Further, wrong entries may be considered a human error and CGMSCL is in the process of implementing the Bar-coding system to overcome this situation.

Failure to verify authenticity of input data (B)

Validity checks for data entered into the system must be integrated to verify the authenticity of the input entered into the database.

Audit observed that in EMIS database, input data was entered without checking validity and authenticity and accepted in the master table massuppliers table as shown in Table - 4.37:

Validity period of two year with maximum extension period of six months

Bagree Enterprises, Mokshit Corporation, Asha Medical System, Medico Surgical, Nitiraj Engineers Ltd., CB Corporation.

Compound Sodium Lactate Inj. IP- 93MI317027, H1N1 Trivalent Vaccine- R3J143V, Pneumococcal Injection- T012369, H1N1 Quadrivalent Vaccine- UJ381AA

Tender No. 029E(P), 057/E(P), 125E(P), 141E(P), 87(R2)/E(P), 141(R)E(P)

Table - 4.37: Statement showing invalid records entered in database

supplier_id	is_contractor	Name	mobile_no
22	NULL	M/s. Allied Medical Limited	7773006975
42	NULL	Getiange India PVT.LTD	7773006975
44	NULL	Dee Enterprises	9329759559
46	NULL	Faith Innovation	8889997404
48	NULL	Faith Biotech Ltd	8889997404
57	NULL	M/s Aarogya Medico	333
58	NULL	Hospimedica Inernational Ltd	333
59	NULL	M/s Sun Medical System	333
62	NULL	Avasarala Technology Limited	9329759559
110	NULL	Jai shree medical store	1111122222
111	NULL	Labtop	1111122222

(Source: Data extracted from DPDMIS and compiled by Audit)

As shown in the above Table - 4.37, the same mobile number for different suppliers and invalid mobile numbers with less than 10 digits were also accepted indicating lack of validity checks in the system.

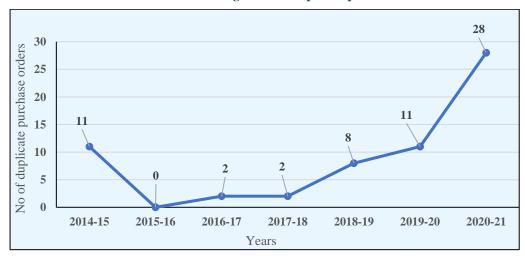
Government replied (November 2022) that checks have been implemented for new supplier entries where software would only accept entries of ten-digit number and no duplicate entry would be accepted.

(C) Failure to check duplicity of records

DPDMIS and EMIS software will generate a unique purchase order number, order type, order date and quantity when an order is placed to supplier.

Data analysis of DPDMIS and EMIS database revealed that in 14 cases, two or more Purchase Orders (PO) having same number were found indicating issue of duplicate POs. The year-wise trend of the duplicate POs is depicted in *Chart - 4.3*

Chart - 4.3: Chart showing trend of duplicate purchase orders



It could be seen from the preceding chart that in the absence of any check in the system, the software is generating more than one PO number for the same purchase order.

Government stated that (November 2022) all 14 cases do not have a dispatch number, hence, the POs are incomplete.

The reply is not acceptable as the system has issued duplicate PO numbers rather than generating a unique number for every PO.

4.10.3.2 Processing controls

Process controls inbuilt in the system must ensure that the process was complete and accurate and processed data was updated in the relevant files. The defects in the programming logic and the non-incorporation of all the business rules in the system with respect to contract conditions noticed in audit are discussed below.

(A) Supply of drugs more than indent under push mechanism

CGMSCL invites tender for procurement of drugs based on the indent from different Directorates and after issue of PO, the vendor delivers the drugs to 16 warehouses of the State for onward distribution to the healthcare facilities using DPDMIS. Warehouses supply drugs to healthcare facilities based on the monthly indent furnished by them using First Expiry First Out (FEFO) method. DPDMIS enables the warehouses to supply near-expiry drugs using a push mechanism without any demand from the health facilities.

Audit analysis of database revealed that CGMSCL supplied 1101 types⁷² of drugs to the healthcare facilities of Directorates⁷³ across the State during the period 2016-22. Audit observed that CGMSCL had supplied drugs in excess of the requirement ranging between 0.01 to 467 *per cent* of the average annual consumption⁷⁴ to the facilities.

As there is no mechanism to capture data on the drugs expired in the store as well as distributed to patients in healthcare facilities, the expiry of drugs due to excess supply under the push mechanism cannot be ruled out, which has been discussed in *paragraph 4.4.4*.

Government replied (November 2022) that currently the system is not based on consumption rather it is based on indent quantity. Therefore, there could be variations in the consumption pattern. Also, from the next FY i.e., 2023-2024, CGMSCL would restrict the issue quantity and would not issue drugs more than the AI received from the facilities.

(B) Non-implementation of barcoding system

Implementation of Barcoding System addresses the issue of authenticity of drugs and improves traceability which benefits the entire healthcare supply chain, from manufacturing units to end users.

⁷² 510 allopathic drugs supplied to DHS and DME and 591 types of AYUSH drugs.

⁷³ DHS, DME and AYUSH

⁷⁴ Calculated as average of year wise supply from warehouse to the facilities.

10. Details captured by GS1 Barcode

The General Conditions of the Tender dated February 2016 (clause no. 7.5(vii), 8.7 and 11.2.3) states that secondary and tertiary packs should bear GS1 barcode containing the detailed product information. No medicine will be accepted without barcode and non-compliance to barcode requirement may be penalized up to 1.5 *per cent* (for secondary packing one *per cent* & for tertiary packing 0.5 *per cent*) on the value of goods.

As per the DPDMIS data, out of 39,757 MRCs received from 201 suppliers during the period 2016-21, barcode was not present at the secondary level of packaging in 23,671 MRCs (60 *per cent*) with purchase value of ₹ 574.43 crore and at tertiary level in 18,126 MRCs (46 *per cent*) with purchase value of ₹ 346.33 crore. In 15,850 (40 *per cent*) cases barcode was not present at any level of the packing as per terms and conditions of tender. The penalty amount of ₹ 7.47 crore⁷⁵ was not deducted for non-compliance to barcode requirement as per tender conditions.

Additionally, during the test check of 39 drug samples (*Appendix - 4.14*), it was observed that only 9.09 *per cent* (Primary Packing) and 22.72 *per cent* (Secondary Packing) of the medicines supplied have fulfilled the barcode requirements as specified in the tender documents of CGMSCL.

As discussed in the 30th Board of Directors (BoD) meeting (23 February 2019), though the tender document already included provision of bar code requirement for supplier, but the CGMSCL was not scanning the barcode. It was decided to implement the Barcoding system in all the levels as barcoding is an essential requirement for removing discrepancies in the system due to manual data capturing. The barcoding system was to be implemented at tertiary level as suggested by GS1⁷⁶ Organisation.

Audit observed that for the implementation of barcoding system, necessary equipment was not procured by the CGMSCL as of June 2022. Audit analysis of database revealed that field/column for barcode compliance was present along with every Material Receipt Certificate (MRC), but with "Yes/No" reply. However, the details of drugs were not captured by scanning the barcode at the time of receipt of drugs from the supplier and issue of drugs to healthcare facilities.

Implementation of the barcoding system enables the distribution system of CGMSCL to be more efficient and improves patient safety. Absence of barcode system prevents CGMSCL to track the movement of drugs from the

absence of barcoding in tertiary packing.

GS1 is a not-for-profit standards organisation, set up by the Ministry of Commerce and

Penalty amount for non-compliance to barcode requirement calculated as 1 *per cent* of purchase value for absence of barcoding in secondary packing and 0.5 *per cent* for absence of barcoding in tertiary packing.

Industry, Government of India, along with CII, FICCI, ASSOCHAM, FIEO, IMC, BIS, Spices Board, APEDA, and IIP.

point of manufacture to the point of supply and verifying the authenticity of drugs.

Government stated (November 2022) that CGMSCL is in discussion with GS1 Barcode company for the implementation of barcoding requirements. The process of mapping drugs with suppliers is in progress.

(C) Non-mapping of business rules for levy of LD

CGMSCL issues purchase orders to the suppliers for drugs and equipment for onward supply to healthcare facilities within the stipulated time failing which liquidated damages were to be levied as per terms and conditions⁷⁷ of the tender. The tender states that the entire ordered quantity shall be supplied within 60 days from the date of purchase order. Irrespective of any reason even beyond the control of supplier, it should complete the supply of the ordered quantity before 90/120 days (with proper approval of MD, CGMSCL) of issue of the purchase order after which Liquidated Damages (LD) would be levied by CGMSCL.

- Data analysis of DPDMIS database revealed that in 692 instances, various suppliers failed to execute orders within the stipulated period and the delivery of drugs was pending for supply with delays ranging from 97 to 1729 days.
- Data analysis of EMIS database revealed that 5046 purchase orders were either not executed or equipment not installed after supply with a delay ranging from 125 to 1204 days.

As the payment module was not fully operational in DPDMIS and EMIS, details of action taken against non-supply and the amount of LD levied from the suppliers was not captured in the system till date due to non-mapping of business rules for LD.

Government stated (November 2022) that LD was calculated manually based on MRC till August 2021. Payment Module has been implemented since February 2021 (DPDMIS) and April 2021 (EMIS).

The reply is not acceptable as CGMSCL failed to implement the payment module and the levy of the liquidated damages was not captured in the system for maintaining transparency.

(D) Non-adherence to business principles in EMIS software

CGMSCL developed web-based application software, Equipment Management Information System (EMIS) for effective supply chain management of equipment. During data analysis of EMIS, audit observed following cases of non-adherence to business principles:

➤ During 2016-22, in 42 tenders⁷⁸ multiple POs were issued through the system for an item by the Directorates (DHS, DME & AYUSH) to the same supplier on the same date without any process control checks.

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As per clause no. 6 of section II, 10 of section III for drugs and clause no. 5 of section II, 7 of section III for equipment

PO issued to 26 suppliers in 42 tenders during 2016-22.

➤ Indent of DHS for equipment AYUSH31 (Blood Cell Counter) for the year 2018-19 was 60 units but the procured quantity was 70 units, as depicted in *Table - 4.38*.

Table - 4.38: Statement showing procurement vis-à-vis indent of DHS in 2018-19

Equipment Code	Indent Date	Indent Quantity	PO Number	Procured Quantity
AYUSH 31	31.07.2018	55	EQP/223/2018-19 Dt 04/08/18	7
	07.08.2018	5	EQP/327/2018-19 Dt 25/08/18	15
			EQP/328/2018-19 Dt 25/08/18	16
			EQP/329/2018-19 Dt 25/08/18	27
			EQP/571/2018-19 Dt 08/03/19	5
Total Indent		60	Total Procurement	70

(Source: Data extracted from EMIS and compiled by Audit)

- ➤ The indent quantity by DHS for AYUSH31 for 2018-19 is shown as 61 as system allowed indent from the previous year 2017-18 (07 October 2017) in the year 2018-19.
- ➤ CGMSCL issued tenders of the same equipment i.e., Blood Cell Counter using different equipment Code BCC001 and AYUSH31.

Government accepted (November 2022) that the system did not have any checks for placing the multiple purchase orders for the procurement of equipment. A check would be placed before placing PO of previous year indents, post the approval and discussion with Directorates.

(E) Delay in Quality Control (QC) reporting

CGMSCL has created Quality Control (QC) protocols to monitor the aspects of QC such as delay in reporting by the testing laboratories and supply of sub-standard drugs, to ensure that quality drugs are procured and supplied to the healthcare facilities.

As per the agreement clause 15 (i) and (ii) of the quality assurance test of drugs, the empaneled laboratory should do complete analysis of each sample and furnish the test report within 8/21 days of receipt of the sample. Further as per clause 15 (iv), for any delay of more than the stipulated period, 0.5 *per cent* of the testing charges per day would be deducted as penalty, subject to a maximum 20 *per cent*.

Details of delay in submission of the QC reports by the empaneled labs observed during data analysis of QC module of DPDMIS for the period 2016-22 is depicted in *Chart - 4.4*.

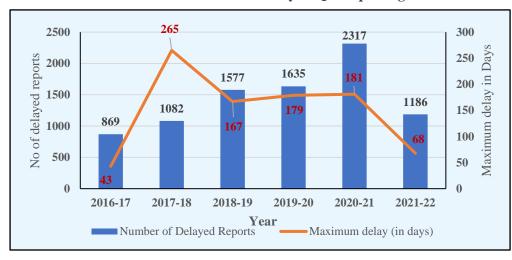


Chart - 4.4: Year wise delay in QC Reporting

As observed, during the period 2016-2022, in 8,666 samples (32 per cent) out of 26,924 samples, the empaneled labs submitted QC reports with delays ranging between 43 to 265 days against the stipulated period of 8/21 days resulting in loss of useful life of drugs. Further, the penalty amount levied for the delay was not reflected in the system and action taken against the empaneled labs, if any, was not recorded in DPDMIS.

Government stated that (November 2022) QC dashboard is present for monitoring of sample status and labs. If any delay is found for QC testing, a penalty is imposed on the labs.

The reply is not acceptable as 32 *per cent* of QC reports were received with delay and the penalty amount levied was not captured in the system.

4.10.3.3 Output Controls

Output controls ensure that computer output is complete and accurate. Weaknesses in the output controls noticed in the audit are discussed below.

(A) Discrepancies in facility management module

The facility management module was implemented (2017) as per the health facility manual of DPDMIS. Data analysis of test-checked facility CHC, Konta revealed discrepancies in the facility management module as mentioned below:

➤ The test checked facility, CHC Konta is a secondary-level facility for the distribution of drugs as per EDL⁷⁹. It was observed that the facility was indenting and receiving tertiary-level drugs on a regular basis despite being a secondary-level facility. The details of such instances are mentioned in *Table - 4.39*:

Essential Drug List (EDL) issued by Department of Health & Family Welfare in 2019.

Table - 4.39: Year wise supply of tertiary level drugs to facility

Year	Number of Drugs	Name of Drugs which are tertiary level drugs as per the EDL
2016-17	5	D350- Midazolam Inj.IP
2017-18	6	D187- Dobutamine HCL Inj.
2018-19	13	D378- Ofloxacin Tablet
2019-20	5	D94- Cefadroxyl for Oral Suspension D93- Cefadroxyl Tablet
		D21- Amikacin Sulphate Inj.
		D498- Terbutaline Inj,
		D744- Telmisartan Tablet
		D725- Rabies Immunoglobulin Equine Injection
		ND9- Piperacillin and Tazobactum Powder,
		D728- Rapid Acting Insuline Analogue Injection
		D569- Biphasic Insuline
		D734- Sodium corboxymethyl Cellulose+Stablized Oxychloro Complex
		D535- Xylometazoline Nasal Drop
		D510- Tranexamic Acid Injection
		ND37- Long-Acting Insulin Glargin Cartridge
		D626- Escitalopram Tablet

(Source: Data extracted from DPDMIS and compiled by Audit)

Data analysis further revealed that quantity of 25.78 lakh tertiary drugs valuing ₹ 5.66 crore was supplied to 768 PHCs out of 805 PHCs across the State.

- ➤ Data related to the expiry of drugs and their disposal was not recorded at the facility level in DPDMIS.
- As per manual, CHCs should forward indents online once a month. However, data analysis revealed that CHC Konta forwarded indents multiple times in a month primarily in manual mode with manual indents ranging from 90.35 per cent to 100 per cent of indents during 2017-21, as depicted in *Chart 4.5*.

Chart - 4.5: Year wise type of indent by facility 400 350 300 Number of Indent 250 200 346 150 284 100 170 114 50 0 2017-18 2018-19 2019-20 2020-21 Year ■ Total Indents ■ No. of Online Indent

Regarding supply of tertiary-level drugs Government stated (November 2022) that CGMSCL does not issue higher-category drugs to lower-level facilities. There is a provision in DPDMIS of the interfacility transfer of drugs of different levels as and when required. Regarding capturing data on expired

drugs, GoCG stated that the details of expired drugs and the disposal process will be captured at the facility level after consultation with Directorates.

Reply is not acceptable as secondary-level facilities are receiving tertiary-level drugs against the norms stipulated in EDL through DPDMIS in the absence of any checks in the system.

4.10.4 Information system security

An effective IT security policy is important for the protection of the information assets created and maintained by the organization. Weaknesses in IT security noticed in Audit are discussed below.

4.10.4.1 Non-formulation of Password policy

As per the IT policy of the Department of Electronics and Information Technology (DEIT), GoI, the same password should not be used by more than one person, so that the authenticity of the data entered can be verified at later stages.

Data analysis of DPDMIS revealed that four common passwords given to the users were used by 28 out of 237 users. It was also observed that CGMSCL has not formulated any password policy for the users and also not implemented any automated checks to enforce the security criteria of the system.

Government stated that (November 2022) that they have since created a password policy (07 November 2022). Further, DPDMIS while creating a new user, sets a default password for the user and the user is to ensure that the default password is changed as soon as possible.

The reply is not acceptable as even default passwords should be different in the system and checks indicating the user to change their passwords periodically and repetition of same password have not been formulated in the system.

4.10.4.2 Absence of robust website security policy

CGMSCL has been hosting nine Universal Resource Locators⁸⁰ (URLs) as websites on the web server for the operation of DPDMIS, EMIS, and HIMIS. The following shortcomings regarding website security were noticed during the Audit:

To comply with the guidelines regarding website security of URLs issued by the Computer Emergency Response Team (CERT) in 2017, CGMSCL issued (August 2019) work order to M/s iSec Services Private Ltd. Mumbai for conducting a security audit of five URLs⁸¹ of CGMSCL. Audit observed that CGMSCL obtained security clearance for only one URL⁸² and the results of the security audit of the remaining four URLs were not found on the records. Further, security clearance of

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¹⁾ CGMSCL, 2) DPDMIS, 3) Drug Reports, 4) EMIS, 5) HIMIS, 6) Facility Online, 7) Warehouse Login, 8) Facility DDC login, 9) Vendor registration system (VRS)

¹⁾ CGMSCL, 2) DPDMIS, 3) EMIS, 4) HIMIS, 5) VRS

⁸² DPDMIS

two other URLs⁸³ were received for which no work order was issued by CGMSCL.

The websites should be hosted using *https* protocol employing Secure Socket Layer (SSL) encryption. Audit observed that out of the nine URLs hosted by CGMSCL only four URLs⁸⁴ are SSL certified.

Government stated (November 2022) that the security audit has been completed and a certificate for the same has also been issued by certified empaneled firm 'Tata Power Delhi Distribution Limited' in March 2022. All the URLs have been SSL certified.

4.10.5 Audit Trail

Internal audit system both in the manual as well as IT environment ensures that the controls are in place.

During the scrutiny of the system, Audit observed that there was no audit module in DPDMIS, EMIS & HIMIS systems to generate customised reports for facilitating the conduct of internal audit. Though the system has been operational since 2013, no mechanism was in place to verify the transactions and stock balances at the warehouses and healthcare facilities due to the absence of audit trails in the system.

Government stated (November 2022) that audit module will be rolled out after the assignment of manpower for the same and audit trail feature will be added by the end of FY 2022-23.

Conclusion

During 2016-22, the Department of Health and Family Welfare, GoCG (Department) had procured drugs, medicines and equipment valuing ₹3,753.18 crore. The GoCG had established (2010) Chhattisgarh State Medical Services Corporation Limited (CGMSCL) as a centralised nodal agency for all procurement and supply of drugs, medicines and equipment under the Health Department.

The Annual Indents (AI) for procurement of drugs, medicines and consumables were finalised by the Directorates of Health Department with delay and in *ad hoc* manner without considering previous consumption, existing stocks and purchase orders already placed. Moreover, programme/scheme drugs were not included in the AI. Further, local purchases were not entered in DPDMIS by Healthcare Institutions (HIs).

Despite having centralised procurement agency, the purchases of drugs, medicines and consumables were made through local purchase (decentralised procurement) which ranged from 26.79 to 50.65 *per cent* of total procurement during 2016-22.

CGMSCL failed to prepare/ finalise purchase manual for standardising purchase process in consonance with Chhattisgarh Stores Purchase Rules (CGSPR) due to which in many cases, purchases were made in violation of CGSPR. Out of total 278 tenders in which Rate Contracts (RCs) for

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Warehouse login and Facility online

⁸⁴ CGMSCL, HIMIS, EMIS, VRS

procurement of drugs, medicines and equipment were finalised during 2016-22, there were delay ranging from three to 649 days in finalisation of 165 tenders. As a result, there were instances of delay in supply of drugs resulting in non-availability of drugs as per essential drugs list (EDL) in the HIs and consequent local purchases or purchase of essential drugs by the patients on its own cost.

The validity period of new RCs for procurement of equipment and drugs was extended from one year to two years and from one year to 18 months respectively with extension period of six months by the CGMSCL without the approval of Competent Authority.

CGMSCL did not finalise the RC for all indented drugs and the percentage of drugs for which RC was not finalised during 2016-22 ranged between 48.82 (2016-2017) and 63.59 (2018-2019) *per cent* of the total indented drugs. Consequently, HIs had purchased untested EDL drugs valuing ₹ 97.93 crore through local purchase during 2017-22.

CGMSCL did not consider the price of reagents required for testing of equipment at the time of procurement of testing equipment and evaluated only cost of testing equipment. This resulted in purchase of reagents (₹ 129.27 crore) without inviting tenders considering them as proprietary item at the rates quoted by the supplier. Further, the technical specifications of equipment were fixed by DHS/ CGMSCL without due diligence which resulted in fixation of tailor-made specifications and led to irregular procurement of equipment worth ₹ 30.48 crore in four cases. CGMSCL had finalised RCs of equipment in three cases without proper assessment of reasonability of quoted rates which led to avoidable extra expenditure of ₹ 3.26 crore.

CGMSCL procured PET-CT machine in PPP mode for GMC, Raipur without finalisation of modalities for operating the machine resulting in idling of equipment and infrastructure worth ₹ 18.46 crore and deprival of intended facility to general public till November 2022. Further, Biosafety Cabinet, Calorimeter and Micro pipette were procured by the Health Department without requirement, which has resulted in unwarranted procurement of ₹ 23.09 crore. Further, 21 medical equipment valuing ₹ 8.13 crore was kept idle in GMCs/GMCHs Ambikapur, Raipur, Jagdalpur and Rajnandgaon due to technical fault, non-availability of vital parts, non-supply of reagents/kits, non-construction of necessary infrastructure, non-providing training to staff.

In case of procurement of drugs, medicines and consumables, CGMSCL had purchased them at higher rates due to lack of monitoring of prevailing market price, procurement by ignoring existing RCs with lower rates, rejection of lower rate on unjustified grounds which resulted in extra expenditure of $\overline{7.35}$ crore. CGMSCL also purchased drugs worth $\overline{23.98}$ crore from blacklisted firms. There were instances of procurement of drugs and medicines at tailor-made specifications. Invitation of tenders with indicative quantity instead of bulk quantity resulted in deprival of benefit of bulk purchase and consequent avoidable loss of $\overline{4.09}$ crore.

CGMSCL failed to get replacement of 'Not of Standard Quality' drugs from the supplier and neither levied penalty of ₹ 1.69 crore nor recovered

demurrage charges of ₹ 24.60 lakh from such defaulting suppliers.

The drugs inventory system was deficient as CGMSCL placed the purchase orders without considering available stock in its warehouses, the previous consumption trend and future requirement resulting in expiry of drugs valuing ₹ 33.63 crore.

There were instances of non-availability of drugs at HIs. Out of 272 EDL drugs required for DHs, only 103 drugs were available in seven test checked districts, as of 31 March 2022. Similarly, out of 149 EDL drugs required for CHCs, only 39 drugs were available in 14 test checked CHCs.

The prescribed temperature at the warehouses for storage of various drugs was not maintained by the CGMSCL due to lack of effective cooling system in test-checked warehouses, which may result in loss of efficacy and quality of drugs.

Procurement agency (CGMSCL) had procured COVID-19 related items worth ₹ 23.13 crore without recommendation of COVID Committee which was irregular.

Four Liquid Medical Oxygen (LMO) tanks purchased for GMCHs were lying idle. Further, Cryogenic LMO tank (12KL) fixed in DKSPGI hospital was not connected to the oxygen pipeline of the hospital.

There was lack of planning in developing IT system as the database of different software viz., Drug Procurement and Distribution Management Information System (DPDMIS), Equipment Management Information System (EMIS), Health Infrastructure Management Information System (HIMIS) and e-procurement were not interconnected and had overlapping modules related to procurement and payment.

In DPDMIS and EMIS various input processing/output controls and system security were inadequate such as failure to capture details of drugs at the time of receipt by scanning barcode, tertiary level drugs supplied to PHC, failure to generate unique Purchase Order (PO) number, non-levy of Liquidated Damages (LD)/penalty through system in case of delay in supply drugs and quality control reports.

Recommendations

The GoCG should:

- 12. ensure timeliness in procurement of centralised purchase of drugs, medicines and equipment for uninterrupted supply to HIs;
- 13. prepare standard generic specification for commonly used equipment across all the HIs to maintain uniformity and economy;
- 14. prepare the procurement manual in accordance with CGSPR.
- 15. evaluate the tenders of testing equipment in such a manner that cost of consumables/reagents may also be considered.
- 16. strengthen the inventory management system in CGMSCL by applying scientific methods of inventory management and considering the existing stock, previous consumption trend and future demand.

- 17. ensure that asset created under emergency procurement viz., oxygen plant, oxygen pipeline etc., are put to use at HIs.
- 18. strengthen process control/ output controls by proper mapping of business rules in IT system developed/to be developed.
- 19. ensure proper validity checks in the system to prevent unauthentic and duplicate data with minimum manual intervention.
- 20. initiate action to achieve full computerisation for interconnection of available databases of different software and operationalisation of all existing modules.
- 21. ensure implementation of the barcode scanning system.