

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

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Availability of drugs, medicines, equipment and other consumables

Availability of drugs, medicines, equipment and other consumables constitute vital components for delivering comprehensive health services. The State Government had constituted (April 1996) the Punjab Health Systems Corporation (PHSC) under PHSC Act, 1996, to procure, stock and distribute drugs and to purchase, maintain and allocate quality equipment to various health institutions. Further, PHSC is implementing (August 2014) a customised Drugs and Vaccine Distribution Management System (DVDMS) named ‘e-Aushadhi’ with a view to strengthening and streamlining the supply chain management system for storage and distribution of drugs and consumables in the State of Punjab.

Audit findings on various components of drug management *viz.* availability of drugs, their storage, dispensation to patients and procurement in the health institutions are discussed in the succeeding paragraphs.

4.1 Availability of essential and critical drugs, medicines and consumables

As per IPHS norms 2012, 493 drugs, lab reagents, consumables and disposables under 20 different categories for minimum assured services should be available in a District Hospital. Availability of drugs, lab reagents, consumables and disposables under 20 categories in the test-checked DHs/RH is as detailed in **Table 4.1**.

Table 4.1: Availability of essential Drugs, Lab Reagents, Consumables and Disposables in test-checked DHs/RH as of December 2022

Sr. No.	Categories	Number required as per IPHS	Availability in test-checked DHs/RH						
			DH, Bathinda	DH, Fatehgarh Sahib	DH, Gurdaspur	DH, Hoshiarpur	DH, Ludhiana	DH, Moga	RH, Patiala
1.	Analgesic/Antipyretics/Anti Inflammatory	11	7	6	7	8	6	7	6
2.	Antibiotics & Chemotherapeutics	76	28	21	22	25	24	22	17
3.	Anti Diarrhoeal	6	3	1	2	0	1	2	0
4.	Dressing Material/Antiseptic Ointment Lotion	24	12	9	12	11	8	15	9
5.	Infusion Fluids	14	11	9	9	9	10	11	10
6.	Eye and ENT	25	2	1	2	2	2	2	1
7.	Antihistamines/Anti-allergic	12	7	4	5	6	5	5	2
8.	Drugs acting on Digestive system	20	10	8	6	7	6	7	2
9.	Drugs related to Haemopoietic or Hematopoietic system	4	3	1	2	2	1	2	0

Sr. No.	Categories	Number required as per IPHS	Availability in test-checked DHs/RH						
			DH, Bathinda	DH, Fatehgarh Sahib	DH, Gurdaspur	DH, Hoshiarpur	DH, Ludhiana	DH, Moga	RH, Patiala
10.	Drugs acting on Cardiovascular system	26	10	9	10	9	12	11	8
11.	Drugs acting on Central/Peripheral Nervous system	40	20	15	15	18	20	19	13
12.	Drugs acting on Respiratory system	16	8	5	6	6	5	7	3
13.	Skin Ointment/Lotion, etc.	23	9	4	5	7	4	6	2
14.	Drugs acting on Uro-genital system	5	4	3	3	2	3	4	1
15.	Drugs used in Obstetrics and Gynaecology	35	13	12	14	15	16	13	6
16.	Hormonal Preparation	14	4	1	1	2	1	3	3
17.	Vitamins	24	8	7	8	11	7	10	7
18.	Other drugs and material & misc. items	83	24	26	33	26	25	35	11
19.	Emergency life-saving drugs for SNCU	12	8	6	9	7	7	8	8
20.	Other essential medicines & supplies for SNCU	23	10	10	15	11	14	17	11
Total		493	201	158	186	184	177	206	120

Source: Information furnished by test-checked Health Institutions

Colour Code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'
	Red denotes 'most shortage'

It is evident from the above table that the availability of essential drugs, consumables and disposables was below 50 per cent in all the test-checked DHs, which could be attributed mainly to short procurement of essential drugs by PHSC, as discussed in **Paragraph 4.3.1**. Further, the availability of essential drugs, consumables and disposables was also poor in RH Patiala being a tertiary healthcare institution, though IPHS norms were not applicable on this hospital.

Such substantial shortage of drugs in these secondary level hospitals not only compromised the health of the patients but also put extra financial burden on them especially those belonging to poor families.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.2 Availability of equipment in selected DHs

Under IPHS 2012 norms, equipment norms are worked out keeping in mind the assured service recommended for various grades of the district hospitals. The equipment required are worked out under 25 different categories. Some of the equipment which may be available in an ideal situation are indicated as Desirable while the rest are categorised as Essential.

During the course of audit, availability of essential equipment¹ listed under 18 different categories of IPHS 2012 norms for DHs and 2 categories involving 33 essential equipment selected from NHM Assessor's Guidebook for Quality Assurance in District Hospitals which are required in DHs have been checked in test-checked DHs. The details of different numbers of equipment prescribed and availability in DHs (as of March 2021) are given in **Table 4.2**.

Table 4.2: Position of availability of equipment in the selected DHs

Sr. No.	Name of equipment	Types of essential equipment required for hospital		Types of equipment available in sampled DHs					
		100 to 200 bedded	201 to 300 bedded	Bathinda (200 beds)	Fatehgarh Sahib (100 beds)	Gurdaspur (110 beds)	Hoshiarpur (200 beds)	Ludhiana (290 beds)	Moga (150 beds)
1.	Imaging equipment	11	13	6	7	7	4	10	9
2.	X-ray room accessories								
3.	Cardiopulmonary equipment	12	14	0	0	1	0	9	0
4.	Labour, Neo-Natal and SNCU equipment	27	27	16	10	15	21	12	12
5.	General equipment for SNCU (11)	38	38	22	0	21	20	29	23
6.	Disinfection equipment for SNCU (11)								
7.	Equipment for individual patient care in the Special Newborn Care Unit (16)								
8.	Immunisation equipment	13	13	9	8	13	11	13	6
9.	ENT equipment	18	20	5	4	1	1	2	2
10.	Eye equipment	24	24	15	11	13	18	21	20
11.	Dental equipment	42	42	22	22	16	25	16	27
12.	Operation Theater equipment	21	22	7	6	4	7	8	9
13.	Laboratory equipment	51	51	15	12	16	15	22	25
14.	Surgical equipment sets	43	53	14	9	2	12	20	14
15.	Endoscopy equipment	3	7	1	1	0	0	0	1
16.	Anaesthesia equipment	15	16	10	5	7	5	13	7
17.	Post-mortem equipment	7	7	5	4	2	5	5	7
18.	ICU equipment	10	10	0	0	4	0	8	0
19.	Emergency services equipment	14	14	11	8	10	7	12	6
20.	IPD equipment	19	19	12	11	6	18	7	9
	Total	368	390	170	118	138	169	207	177
	Shortage			198	250	230	199	183	191
	Shortage in percentage			54	68	63	54	47	52

Source: Information furnished by test-checked DHs

Colour code:

Good	Average	Poor
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Table 4.2 shows that:

- There was a huge shortage of various types of equipment ranging between 47 per cent and 68 per cent in test-checked DHs with substantial shortage in DHs Fatehgarh Sahib (68 per cent) and Gurdaspur (63 per cent).

¹ 335 and 357 essential equipment are required for 100 to 200 bedded and 201 to 300 bedded district hospital respectively.

- The major shortage of equipment in test-checked DHs was in Cardiopulmonary, ENT, Operation Theatre, Laboratory, Surgical and Endoscopy equipment.
- Shortage of ICU equipment in DH Gurdaspur and DH Ludhiana was 60 per cent and 20 per cent respectively. No ICU equipment was available in other test-checked DHs.

4.2.1 Shortage of equipment in RH, Patiala

National Medical Council norms also prescribe 926 types of essential equipment in clinical departments of Government Medical College and Hospital.

In RH Patiala, against the requirement of 926 types of equipment, only 555 equipment (March 2021) were available. Thus, there was a shortage of 40.06 per cent in various types of equipment (*Appendix 4.1*).

The reply of the State Government was awaited (February 2024).

4.2.2 Shortage of equipment in CHCs/PHCs

IPHS 2012 norms prescribe 32 types of essential equipment for CHC and 26 types of equipment for PHC. Status of equipment in test-checked CHCs/PHCs (March 2021) is given in *Appendix 4.2* and **Table 4.3**.

Table 4.3: Availability of equipment in test-checked CHCs/PHCs

Healthcare Facility	CHCs/ PHCs without any shortfall	CHCs/ PHCs with shortfall (per cent)				
		1 to 25%	26 to 50%	51 to 75%	76 to 99%	100%
CHCs (12)	0	9	1	2	0	0
PHCs (22*)	0	9	8	4	1	0

Source: Test-checked CHCs/PHCs

* Data in respect of two PHCs viz. Jodhpur Pakhar and Nanowal was not provided to Audit.

Audit noticed that non-availability of types of equipment varied from 9 per cent to 53 per cent in sampled CHCs with highest shortage in CHCs at Naushera Majja Singh and Mahilpur. In PHCs, it was from 4 per cent to 77 per cent and highest shortage was noticed in PHC, Thathi Bhai.

Acute shortage of equipment at various levels such as RH/DHs/CHCs/PHCs adversely affected the services of healthcare institutions.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.3 Procurement of drugs/medicines

Timely supply of drugs of good quality, which involves procurement as well as logistics management, is of critical importance in any health system. As mentioned earlier, the State Government established (April 1996) Punjab Health Systems Corporation (PHSC) for purchase of drugs, consumables and equipment (including installation and maintenance) for various health institutions in the State. PHSC operates “Online Drug Inventory and Supply Chain Management System”. Field units make online demand for medicines through this system on the basis of which PHSC procures medicines. However, in case of medicines, consumables, etc. in short supply or non-availability in the Drug Warehouse, the health institutions could procure these medicines locally.

4.3.1 Short procurement of essential drugs by PHSC

IPHS 2012 norms prescribe availability of 394 essential drugs/medicines (excluding reagents, consumables and disposables) under 18 categories in hospitals. However, Punjab Health Systems Corporation (PHSC) had prepared and approved 214 to 235 drugs only as a list of Essential Drugs (EDL) during 2016-17 to 2021-22. Moreover, no drug/medicine was approved category-wise.

Essential drugs approved and procured by PHSC during the period 2016-17 to 2021-22 is shown in **Table 4.4**.

Table 4.4: Position of essential drugs purchased by PHSC

Period	No. of essential drugs required as per IPHS norms	No. of essential drugs approved and purchased by PHSC			Short procurement of drugs as per IPHS norms (%age)
		Approved	Purchased	Not purchased (%age)	
2016-17	394	214	205	9 (4)	189 (48)
2017-18	394	226	196	30 (13)	198 (50)
2018-19	394	226	181	45 (20)	213 (54)
2019-20	394	235	213	22 (9)	181 (46)
2020-21	394	235	203	32 (14)	191 (48)
2021-22	394	235	189	46 (20)	205 (52)

Source: PHSC data

Table 4.4 shows that all the essential drugs as required under IPHS norms were not procured by PHSC and the short procurement ranged between 46 per cent and 54 per cent during 2016-2022. Moreover, PHSC could not procure its own approved essential drugs ranging between 4 per cent and 20 per cent. The short availability of drugs and consumables in various health institutions could be attributed to short/delayed supply of drugs and consumables, as discussed in **Paragraphs 4.3.3.2, 4.3.3.4 and 4.3.3.5**.

The Department, while admitting the facts, stated (December 2022) that all efforts were being made to ensure maximum availability of drugs at the facility level as per requirements/norms for the concerned level of hospital facility. It was also stated that recently the eligibility criteria for the medicines had been reviewed/revised and it was expected that the position would further improve.

4.3.2 Non-procurement of approved essential drugs under Janani Shishu Suraksha Karyakaram

As per Guidelines of Janani Shishu Suraksha Karyakaram (JSSK), drugs are required to be given free of cost to pregnant women during Ante-Natal Care (ANC), Intra-Natal Care (INC), Post-Natal Care (PNC) which includes management of normal delivery, C-section and complications during pregnancy and childbirth. The same is also needed when a neonate is sick and needs urgent and priority treatment.

JSSK guidelines prescribe availability of 93 essential drugs in hospitals, but PHSC had approved 48 to 65 essential drugs under the Karyakaram during 2016-2022. Moreover, PHSC could not make available even its own approved essential drugs. Details of non-procurement/short procurement of drugs under JSSK is detailed in **Table 4.5**.

Table 4.5: Position of procurement of drugs under JSSK scheme by PHSC

Period	No. of drugs required as per JSSK guidelines	No. of essential drugs approved and purchased by PHSC			Short procurement of drugs as per JSSK guidelines (%age)
		Approved	Purchased	Not procured (%age)	
2016-17	93	48	37	11 (23)	56 (60)
2017-18	93	57	33	24 (42)	60 (65)
2018-19	93	57	40	17 (30)	53(57)
2019-20	93	65	44	21 (32)	49 (53)
2020-21	93	65	41	24 (37)	52(56)
2021-22	93	65	47	18 (28)	46(49)

Source: PHSC data

It is evident from **Table 4.5** that:

- (i) Essential drugs ranging between 49 *per cent* and 65 *per cent* under JSSK guidelines were not procured by PHSC during the period 2016-2022; and
- (ii) Moreover, even essential drugs ranging between 23 *per cent* and 42 *per cent* approved by PHSC under JSSK were also not procured during the same period.

Further, five essential drugs² were those which were not procured by PHSC throughout the audit period 2016-2022.

Acute shortage of essential drugs reflects poor performance of healthcare institutions compromising the health of the patients.

The Department, while admitting the facts, stated (December 2022) that all efforts were being made to ensure maximum availability of drugs under the JSSK programme at the concerned level of hospital facility through State HQ. If any essentially required item under JSSK could not be procured and supplied through State HQs, the same was being procured at local level by the hospitals as such items are generally those items for which either other alternatives were available or consumption was very less. The reply of the Department is not tenable as even after the procurement of drugs by the concerned hospitals, the required essential drugs under JSSK could not be provided, as mentioned under **Paragraphs 4.3.2.1 and 4.3.4.3.**

4.3.2.1 Shortage of EDL under JSSK in healthcare institutions

JSSK Guidelines prescribe availability of 93 essential drugs in hospitals, but PHSC had approved EDL for JSSK containing 48 to 65 drugs only during the period from 2016-17 to 2020-21. Moreover, PHSC could not make available even its own approved essential drugs and the position of shortages in the six DHs and RH Patiala was as detailed in **Table 4.6.**

Table 4.6: Position of essential drugs under JSSK scheme in selected DHs and RH-Patiala

Year	2016-17	2017-18	2018-19	2019-20	2020-21
No. of drugs enlisted in EDL	48	57	57	65	65
No. of drugs not available throughout the year	8 to 34	5 to 43	5 to 46	5 to 50	5 to 49
Number of drugs not available for upto two months	1 to 5	1 to 5	2 to 4	1 to 10	1 to 6
Number of drugs not available for two to four months	1 to 5	1 to 6	1 to 12	3 to 6	3 to 9
Number of drugs not available for more than four months but less than one year	2 to 16	1 to 15	2 to 13	8 to 19	6 to 25

Source: Data from test-checked hospitals/RH-Patiala

It is evident from **Table 4.6** that:

- Against the required essential drugs, 5 to 50 drugs were not available in test-checked six DHs and RH Patiala during the period 2016-2021.

² (i) Amoxycillin 250 mg + Cloxacillin 250 mg + Lactobacillus Spores 60 Million Cap/Tab; (ii) Levo Salbutamol Respirator 0.31 mg; (iii) Misoprost Tab 25 mcg/ 200 mcg; (iv) Nitrofurantoin 150 mg SR Tab; and (v) Zinc Sulphate 20 mg/5ml syrup.

- As many as 1 to 10 drugs, 1 to 12 drugs and 1 to 25 drugs were found out of stock for up to two months, for two to four months and for more than four months but less than one year respectively.

Similarly, shortage of essential drugs under JSSK in the test-checked CHCs is detailed in **Table 4.7**.

Table 4.7: Position of essential drugs under JSSK in selected CHCs

Year	2016-17	2017-18	2018-19	2019-20	2020-21
No. of drugs enlisted in EDL	48	57	57	65	65
No. of drugs not available throughout the year	20 to 48	33 to 57	32 to 57	32 to 65	27 to 65
Number of drugs not available for up to two months	2 to 13	3 to 6	0 to 5	1 to 5	1 to 5
Number of drugs not available for two to four months	2 to 3	1 to 3	2 to 8	1 to 5	1 to 7
Number of drugs not available for more than four months but less than one year	1 to 14	2 to 13	1 to 16	2 to 24	1 to 20

Source: Data from test-checked CHCs

From **Table 4.7** it may be seen that:

- Against the required essential drugs, 20 to 65 drugs were not available in test-checked CHCs throughout the period during 2016-2021.
- Further, 1 to 13 drugs, 1 to 8 drugs and 1 to 24 drugs were found out of stock for the period up to two months, for two to four months and for more than four months but less than one year respectively.

CHC Fatehgarh Churian did not produce stock register for the period 2017-18. In CHCs of Bhucho Mandi and Mehraj, no essential drug was found available during the period 2016-2021.

Thus, due to non/short availability of essential drugs in the healthcare institutions, core objective of the JSSK of providing free medicines to the common man was defeated as the Department failed to provide even the minimum essential drugs.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.3.3 Irregularities in supply of medicine

4.3.3.1 Irregular purchase of drugs from the suppliers whose sample were declared failed two or more times consecutively

Clause 15(ii)(d) of DNIT for purchase of drugs/consumables provides that if two or more batches of the same drug of a manufacturer fail consecutively on testing, the concerned manufacturer will be debarred for the concerned item.

Further, if sample of two or more drugs of a manufacturer fails consecutively, the manufacturer will be debarred and prosecution proceedings will be launched against such manufacturer.

Audit noticed from the data of e-Aushadhi that four drugs were supplied by four suppliers, but two or more batches of drugs supplied by them were found failed, as detailed in **Table 4.8**. PHSC, instead of debarring the suppliers, again purchased the same drugs from them ignoring the terms and conditions of DNIT *ibid*.

Table 4.8: Details of batches of drugs declared failed

Sr. No.	Name of Medicine	No. of batches declared failed	Month & year in which batches failed	Month & year of next purchase
1.	Tab. Atenolol 50 mg	2	March 2017	August 2017
2.	Inj Lignocaine	5	April-June 2018	2019-20
3.	Tab. Pantoprazole 40mg	11	March 2020	December 2020
4.	Tab. Calcium 500 mg	3	September 2020	November 2020

Source: PHSC data

In one case, samples of two drugs³ supplied by one supplier were found failed in quality tests consecutively during the year 2019-20 but the drugs were continuously being purchased from the said supplier even after receipt of the test reports. Instead of debarring and initiating prosecution proceedings against the supplier, purchases were made from this supplier in the subsequent year which is against the provisions *ibid*.

On being pointed out in audit, the Department replied (December 2022) that the test report of each batch as referred in the audit observations is being checked and detailed reply would be furnished on the basis of actual facts. Final reply is awaited.

4.3.3.2 *Non-supply of drugs and consumables by suppliers*

As per Clause 22(b) of the rate contract, delivery in case of medicine and Inj/IV fluid in normal circumstances must be completed within 45 and 60 days respectively and in emergent requirements, the suppliers shall have to deliver the material within 30 days or even earlier and in such cases the supplier must ensure to deliver the material within the period mentioned in the purchase order from the issue of award and on receipt of the order. Further, Clause 34A(b) of the rate contract also provides that if the supplier fails to execute the supplies during the currency of rate contract, he shall be liable to be debarred for the next three years.

During scrutiny of records, it was noticed that PHSC issued supply orders during the period 2020-2022 to 24 suppliers for the supply of 32 drugs/

³ Iron folic acid drops (each ml contains 20 mg iron and 100 micro gm folic acid); and iron and folic acid small tablet (45mg elemental iron and 400 micrograms folic acid).

consumables amounting to ₹ 6.36 crore (*Appendix 4.3*), but no drugs/ consumables were supplied by the suppliers till date (November 2022) and no action was taken by PHSC against the suppliers under terms and conditions *ibid*.

On being pointed out in audit, the Department replied (December 2022) that most of the medicines reflected in the audit observation pertained to the orders placed during COVID period (2020-21) and GoI had advised to consider the condition as *force majeure*, however, notices were issued from time to time to the concerned suppliers who had failed to supply the material but no harsh action of debarring was taken for non-supply considering the situation. The reply of the Department is not convincing as no documents in support of reply were provided.

4.3.3.3 Loss due to expiry of drugs

As per Standard D2 of NHM Assessor's Guidebook for Quality Assurance, scientific management of the inventory is to be adhered, so that drugs and consumables are available in adequate quantity in patient care area. Measurable elements of this standard look into processes of indenting, procurement, storage, expired drugs management, inventory management, stock management at patient care areas, including storage at optimum temperature. While assessing drug management system, these practices should be looked into in each clinical department, especially at the nursing stations and its complementary process at drug stores/pharmacy. Further, as per Rule 2.10(a)(1) of Punjab Financial Rules (PFR), same vigilance should be exercised in respect of expenditure incurred from Government revenues, as a person of ordinary prudence would exercise in respect of expenditure of his own money.

Scrutiny of data of e-Aushadhi portal revealed that various drugs involving 140 batches of ₹ 6.57 crore expired (between July 2015 and July 2021) at DWHs⁴ prior to supply/issuance to the health institutions. Expiry of drugs prior to issuance is in violation of provisions *ibid* and resulted in loss to the State exchequer. Moreover, these expired drugs were also not disposed of.

On being pointed out in audit, the Department while admitting the facts, stated (December 2022) that as per past experience continuous improvisation was being made to ensure that there was no drug left unconsumed at time of expiry. It was also added that as a step in this direction, orders were being placed only for 3-6 months requirements with effect from the year 2020 and therefore the position had improved significantly in this regard.

⁴ Drug Warehouses at Amritsar, Bathinda and Kharar.

4.3.3.4 Short levy of liquidated damages and non-cancellation of order

As per Clause 23(a) of tender documents, if the successful bidder fails to execute the supply order within the stipulated period, penalty at the rate of 0.25 per cent per day of the value of the order not supplied will be levied. The maximum cap of liquidated damages is 15 per cent of contract value of goods not supplied/supplied with delay. Once the maximum penalty/liquidated damages limit is reached, the order shall stand cancelled automatically.

Short levy of liquidated damages: Audit noticed that PHSC issued the supply order (June 2017) to supply two medicines⁵ within 30 days. These medicines were supplied by the supplier with a delay ranging between 28 and 67 days after the due date, but PHSC imposed liquidated damages amounting to ₹ 0.02 crore treating the delay ranging between 3 and 37 days only. This resulted in short levy of liquidated damages of ₹ 0.06 crore (₹ 0.08 crore - ₹ 0.02 crore), as detailed in **Table 4.9**.

Table 4.9: Details of short levy of Liquidated Damages (LD)

<i>(Amount in ₹)</i>								
Name of medicine	Name of DWH	Value of medicines supplied	Cut-off date to supply medicine	Date of supply	Period of delay beyond cut-off date	Amount of LD imposed	Amount of LD required to be imposed	Short levy of LD
Tab. Cefpodoxime 200 mg	Amritsar (Verka)	32,50,800.00	14.7.2017	16.8.17	33 days	24,381.00 (for 3 days)	2,68,191.00	2,43,810.00
	Bathinda	32,50,800.00	14.7.2017	11.8.17	28 days	0.00	2,27,556.00	2,27,556.00
	Kharar	13,49,082.00	14.7.2017	19.9.17	67 days	1,24,790.00 (for 37 days)	2,25,971.00	1,01,181.00
		2,76,318.00	14.7.2017	3.11.17	112 days	77,369.00 (for 112 days)	77,369.00	0.00
Tab. Carbamazepine 200 mg	Amritsar (Verka)	1,49,310.00	14.7.2017	16.8.17	33 days	1,120.00 (for 3 days)	12,318.00	11,198.00
	Bathinda	1,11,982.50	14.7.2017	11.8.17	28 days	0.00	7,839.00	7,839.00
	Kharar	1,11,982.50	14.7.2017	19.9.17	67 days	10,358.00 (for 37 days)	18,757.00	8,399.00
Total		85,00,275.00				2,38,018.00	8,38,001.00	5,99,983.00

Source: PHSC data/information

Non-cancellation of order: Further, in respect of 47 supply orders (during 2016-2021 except 2018-19) of drugs valuing ₹ 2.99 crore, it was noticed that the suppliers failed to supply the requisite drugs within prescribed timeframe and the drugs were supplied with delays ranging between 61 and 253 days after the lapse of prescribed time frame. As maximum cap of liquidated damages of 15 per cent (0.25 * 60 days) of penalty is reached with delay of 60 days after prescribed timeline, the cap had already been reached in the instant cases and orders were required to be cancelled as per the terms and conditions of the contracts.

⁵ (i) Tab. Cefpodoxime 200 (10X10 strip): 25 lakh; and (ii) Tab. Carbamazepine 200 mg (10X10 strip): five lakh.

Audit noticed that PHSC, instead of cancelling the order of the suppliers, accepted the drugs even after the delay which is in violation of terms and conditions of the contract.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.3.3.5 Short supply of Drugs and Consumables

As per Clause 23(h) of the tender document for rate contract (RC) “if the articles are not supplied by the scheduled date full or in part, the order in respect of the quantity not supplied is liable to be cancelled at the contractor’s risk and expense. Further, as per note under Clause 34-A(b), if the firm fails to execute the supplies during the currency of the rate contract, it shall be liable to be debarred for the next three years”.

Scrutiny of data of e-Aushadhi revealed that against 107 supply orders issued to 78 suppliers by PHSC for the supply of drugs and consumables amounting to ₹ 32.94 crore during 2016-2022, the suppliers supplied drugs and consumables amounting to ₹ 20.50 crore only resulting in short supply of material of ₹ 12.44 crore as detailed in **Table 4.10**, but no action was taken by PHSC against these suppliers as required *ibid*.

Table 4.10: Position of drugs supplied by the supplier against the supply order

Year	Number of supply orders against which material supplied short	No. of suppliers involved	Value of supply orders issued (₹ in crore)	Total value of material supplied against column-4 (₹ in crore)
1	2	3	4	5
2016-17	23	17	4.32	3.01
2017-18	28	21	11.31	8.09
2018-19	13	9	3.76	1.79
2019-20	22	13	5.97	3.49
2020-21	17	14	3.98	2.66
2021-22	4	4	3.60	1.46
Total	107	78	32.94	20.50

Source: PHSC data

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.3.3.6 Irregular purchase of Vaccine

As per Clause 40(a) of the tender document for rate contract (RC) of medicines, each batch of medicines will be got tested by the empanelled/Government laboratories. Testing charges on actual basis will be deducted from the payment of the suppliers.

Audit noticed that PHSC entered (December 2019) into a rate contract with a supplier for the supply of vaccine 'Inj. Anti Rabies Vaccine (ARV) (Cell Culture)' which was valid for six months from the date of issue of RC i.e. up to June 2020.

Scrutiny of records revealed that PHSC irregularly procured the above vaccine of ₹ 3.53 crore from the supplier in August 2020 and February 2021 even after the expiry of rate contract/without entering into new RC. Further, samples of this vaccine were not got tested after receiving from the supplier on the basis that vaccines provided by the supplier were got tested by him from National Control Laboratory Kasauli, being a Government Laboratory and so there was no need for Central Quality Control Cell (CQCC) reports. Due to inaction of PHSC, the supplied vaccines escaped the mandatory quality-check as per the provisions *ibid*. Thus, undue favour was given to the supplier by procuring drugs after expiry of RC, besides not getting the quality of medicines tested from the empanelled/Government laboratories by PHSC.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.3.3.7 Delivery of drugs/consumables with short shelf-life

As per Drug Policy (2012-13) of the State Government and terms and conditions of the rate contracts, the material (Drugs/Consumables) supplied should have five-sixth (5/6th) shelf life remaining at the time of delivery.

Mention was made in the Report of the Comptroller and Auditor General of India on Social, General and Economic Sectors (Non-PSUs) - Government of Punjab, for the year ended 31 March 2018, regarding acceptance of drugs/consumables with short shelf life (Paragraph 2.1.7).

Scrutiny of data of e-Aushadhi portal revealed that Drug Warehouses⁶ (DWH) accepted drugs/consumables in 1,858 cases with shorter shelf-life ranging up to 1,291 days at the time of delivery during the period from 2016-17 to 2022-23 (up to September 2022). This was an undue advantage to the suppliers as drugs/consumables delivered with less shelf-life was in contravention of the terms and conditions of the rate contracts. Besides, less shelf-life could also lead to early expiry of drugs/consumables, as discussed in **Paragraph 4.3.3.3**.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

⁶ (i) Bathinda (597) ranging between 1 to 972 days; (ii) Kharar (628) ranging between 1 and 1,291 days; and (iii) Verka (Amritsar) (633) ranging between 1 and 972 days.

4.3.4 Quality control mechanism in respect of drugs

As per Punjab Procurement Policy, the Punjab Health Systems Corporation shall be the Nodal Agency for procurement of medicines, material, machinery and equipment, furniture, etc. for whole of the Department of Health and Family Welfare, Punjab and its different wings. The detailed rules and regulations are provided in the Procurement Policy to purchase the drugs/consumables and medical equipment. Appendix to Paragraph 15 of procedure for procurement of drugs/consumables provides that the tender document should contain the detailed process that will be followed for carrying out inspection/testing of the medicines/material.

4.3.4.1 Supply of medicines without testing

As per Clause 40(b) of the tender document for procurement of medicines and the running Rate Contract (RC), 'Regular and random testing of material will be undertaken from Government/Government approved laboratories at the time of supply and at any time during the shelf life or whenever any defect is noticed'.

Audit noticed that 311 batches of drugs and consumables were supplied by 89 suppliers during 2018-2020 and the same were issued to the health institutions by the Drug Warehouses (DWH) without getting these drugs and consumables tested by the empanelled/Government approved laboratory nominated by the PHSC.

On being pointed out in audit, the Department replied (December 2022) that sometimes due to urgency of requirements, the drugs are issued without testing with the approval of the competent authority and in the meantime testing wherever applicable is carried out. The reply of the Department is not in line with the terms and conditions *ibid*. Moreover, issuance of drugs without testing may cause risk to the patients' health.

4.3.4.2 Supply of NOSQ drugs to the health institutions

Clause 15(ii)(a&c) of DNIT for purchase of drugs/consumables provides that if any supply against the Rate Contract is found to be not of standard quality (NOSQ) on test analysis from approved laboratory, the contractor will be liable to replace the entire quantity or make full payment of entire consignment against the particular invoice irrespective of fact that part or whole of the supplied stores may have been consumed and if the contractor fails to replace the batch declared to be NOSQ or fails to make payment in lieu of that, the contractor is liable to be debarred for two years in respect of one or more or all the items in the rate contract of the DHFW, Punjab.

Audit noticed from the data of e-Aushadhi in PHSC that samples of 126 batches of 26 drugs were found failed during 2016-2021. Out of these,

26 batches of 10 drugs⁷ were further supplied to the health institutions by Drug Warehouses instead of getting it replaced from the suppliers.

It was also noticed that out of these 26 batches, 17 batches of nine drugs were supplied to the health institutions even after the receipt of test report.

During test-check, audit noticed that five such NOSQ drugs involving 11 batches were consumed in RH Patiala, DH Ludhiana and CHCs at Sudhar and Sidhwan Bet.

Issuance of NOSQ drugs for the consumption of patients indicate poor internal control mechanism compromising the health of the patients.

On being pointed out in audit, the Department replied (December 2022) that the test report of each batch as referred to in the audit observations is being checked and detailed reply would be furnished on the basis of actual facts. Final reply was awaited.

4.3.4.3 Non-conducting of sample test and not obtaining of test reports for locally purchased medicines/drugs

The drugs are to be procured centrally at PHSC level for ensuring availability of these medicines at all health institutions of Punjab State. Further, as per Clause 40(a) of tender document for Rate Contract (RC) as well as terms and conditions of supply orders being issued by PHSC, the supplied material should be accompanied with test reports in respect of each batch from NABL accredited laboratory and the material supplied will also be got tested by the PHSC from Government laboratory/empanelled laboratories after the receipt of material and testing charges on actual basis will be deducted from the payment of the suppliers. Condition 15(ii)(a) of tender document provides that if any supply against the Rate Contract are found to be not of standard quality on test analysis from approved laboratory and/or on inspection by competent authority, the contractor will be liable to replace the entire quantity or make full payment of entire consignment against the particular invoice irrespective of fact that part or whole of the supplied stores may have been consumed. However, in case of medicines, etc. in short supply or not available in the Drug Warehouse, the health institutions could procure these medicines locally.

Test-check of records of district hospitals (except DH Moga) showed that DHs had procured medicines/drugs/consumables from the local market and rates contract firms valuing ₹ 17.78 crore during the period 2016-2022. These drugs

⁷ (i) Glutaraldehyde Sol. I.P 2%; (ii) Levocetirizine Tab 5 mg; (iii) Calcium (Calcium Carbonate 1.25 gm equivalent to 500 mgs of elemental calcium, cholecalciferol (Vit D- 3 staboosed) 250 IU tab; (iv) Ribavirin 200mg Cap; (v) Albendazole Tab (400 mg); (vi) Iron and Folic Acid Small (45 mg elemental iron and 400 microgram folic acid)- Pink color; (vii) Iron Folic Acid Drops (each ml contains 20 mg iron and 100 microgram folic acid); (viii) Pantoprazole Tab 40 mg; (ix) Syrup Zinc Sulphate 20mg/ 5ml; and (x) Drop Paracetamol 100mg/ml with dropper.

were purchased locally and were not accompanied by any test reports (except DH Ludhiana). Further, neither was any quality testing of the drugs undertaken nor was any sample got tested separately in accredited laboratories.

In the absence of quality testing of drugs, hospitals were unaware about quality of drugs supplied to the patients. Thus, failure to ensure quality testing diluted the mechanism for supply of quality drugs to the patients in the hospitals.

The reply of the State Government was awaited (February 2024).

4.4 Storage of drugs

Drugs and Cosmetic Rules, 1945 stipulate parameters for the storage of drugs in stores to maintain the efficacy of the procured drugs before issue to patients. The norms and parameters prescribed in the said rules were, however, not adhered to as observed during joint physical verification (January-May 2022) of pharmacies in the test-checked RH/DHs/CHCs/PHCs as detailed in **Table 4.11**.

Table 4.11: Deficiencies in storage of drugs

Sr. No.	Parameters	Deficiency in number of selected healthcare institutions				Total (40)	Shortage (per cent)	Probable impact of not adhering to parameter
		RH (one)	DHs (six)	CHCs (12)	PHCs (21 ⁸)			
1	2	3	4	5	6	7	8=7/40*100	9
1.	Air-conditioned pharmacy	1	2	4	15	22	55	Loss of efficacy and shelf-life of drugs
2.	Labelled shelves/racks	1	2	2	7	12	30	High turnover time in the disbursement of drugs
3.	Away from water and heat	0	0	0	0	0	0	Loss of efficacy and shelf-life of drugs
4.	Drugs stored above the floor	0	1	1	0	2	5	-do-
5.	Drugs stored away from walls	0	0	1	2	3	8	-do-
6.	24-hour temperature recording of cold storage area	1	2	4	11	18	45	-do-
7.	Display instructions for storage of vaccines	1	2	3	9	15	38	-do-
8.	Functional temperature monitoring device in freezers	1	0	1	5	7	18	-do-
9.	Maintenance of temperature chart of deep freezers	1	1	3	5	10	25	-do-
10.	Drugs kept under lock and key	0	0	2	1	3	8	Misuse of costly drugs
11.	Poisons kept in a locked cupboard	0	0	0	2	2	5	Unauthorised access to dangerous drugs
12.	Expired drugs stored separately	0	1	2	5	8	20	Mixing of expired drugs with usable drugs

Source: Test-checked hospitals

⁸ Joint inspection in respect of three PHCs could not be carried out, as one PHC Jodhpur Pakhar was not functional and Medical Officer in two PHCs Malianwala and Bhairupa was not available.

Table 4.11 shows that several major deficiencies (up to 55 per cent) were present in the system of drug storage in the test-checked RH/DHs, CHCs and PHCs; thus, efficacy of drugs distributed to the patients could not be assured.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.4.1 Non-availability of adequate medicine counter in outpatient department

According to IPHS 2012 norms, for every 200 OPD patients daily, there should be one counter for dispensing medicine.

All test-checked health institutions had counters within the benchmark except four DHs at Fatehgarh Sahib, Hoshiarpur, Ludhiana and Moga. The average OPD load per day at these DHs was around 150 to 950 OPDs (2016-2022). However, only one to two drugs dispensing counters were available in these DHs⁹ against required three to five counters.

The reply of the State Government was awaited (February 2024).

4.5 Procurement of equipment and their maintenance

4.5.1 Annual maintenance of equipment

PHSC signed (January 2017) an agreement with a Service Provider for maintenance of Biomedical Equipment in all public healthcare delivery institutions with effect from July 2016. As per agreement, PHSC will pay service charges at the rate of 7.34 per cent per year of Inventory plus Service Tax/GST.

4.5.1.1 Avoidable expenditure incurred on mapping of equipment

As per Paragraph 7(b) of agreement, the service provider was required to have a physical mapping of equipment up to PHC level within three months commencing from 1st July 2016. Further, Rule 15.4(a) of PFR (Vol. I) provides that all materials received should be examined, counted, measured or weighed, as the case may be, when delivery is taken, and should be taken in charge by a responsible Government employee who should see that the quantities are correct and their quality is good, and record a certificate to this effect. The Government employee receiving the stores should also be required to give a certificate that he has actually received the materials and recorded them in the appropriate stock registers.

⁹ (i) DH Fatehgarh Sahib (available two/required four); (ii) DH Hoshiarpur (available one/required five); (iii) DH Ludhiana (available two/required five); and (iv) DH Moga (available one/required three).

Scrutiny of records revealed that:

- (i) Service provider completed the mapping of inventory comprising 136 types of equipment costing ₹ 199.55 crore (functional and non-functional equipment: ₹ 142.17 crore, equipment under AMC/CMC: ₹ 40.21 crore and equipment under warranty: ₹ 17.17 crore) between July-September 2016 for which PHSC paid ₹ 3.00 crore to the service provider.
- (ii) Further, no information was available on record regarding the visits to health institutions by the service provider as a result of which it could not be ascertained whether all the equipment up to root level had been mapped.
- (iii) Out of 136 types of mapped equipment, valuation of 72 types of equipment was assessed at ₹ 71.75 crore on hypothetical basis instead of actual book value. This shows that mapping of equipment had been made on inventory price fixed by the service provider in its own manner, thereby indicating probable excess payment of service charges on this account. It was also seen that a suggestion was given (December 2016) by the Managing Director (MD) of PHSC to form a high-level committee under the chairmanship of ACS to resolve the issues of quantity and cost of equipment mapped by the service provider. However, PHSC failed to form a high-powered committee for proper fixation of inventory price.

The PHSC stated (November 2022) that the prices of maximum equipment were taken as per purchases made by them and the Asset Summary submitted by the service provider; and after checking/correction of equipment-wise asset value, the agreement was framed/signed. The reply of PHSC was not acceptable as the prices of these equipment procured by other States/PGIMER were adopted. Moreover, while making the first payment to the service provider, the Assistant Controller of Finance and Accounts (PHSC) had also pointed out the matter to the MD about the authenticity of quantity of equipment and rate of items mentioned in the list, on which no action was taken.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.5.1.2 Excess payment of service charges

As per Paragraphs 6(a) and 7(g) of agreement, in consecutive quarters, value of the inventory will be recalculated which will include additions and deletions in the existing inventory (adding new equipment after repair, expiry of AMC/CMC and expiry of warranty equipment to the existing inventory).

Scrutiny of records revealed that:

- (i) While mapping equipment and thereafter during October 2016 to June 2021, total value of existing/mapped equipment including Value Added Tax¹⁰ (VAT) was taken whereas there was no such specific condition of including the VAT in the cost of inventory. As such, taking the value including VAT instead of the value without VAT for service charge resulted in excess payment of service charges amounting to ₹ 4.03 crore (including VAT) as detailed in **Table 4.12**.

Table 4.12: Details of excess payment of service charges

(₹ in crore)

Period	Value of equipment with VAT	Value of the equipment without VAT	Value of VAT/ GST	Service charges rate ¹¹ p.a.	Service charges paid in excess	Service Tax/ GST paid on service charges paid in excess* (%)	Total excess payment
1	2	3	4	5	6=4*5/400	7	8=6+7
Jul 16 - Sep 2016	142.17	135.40	6.77	7.34	0.12	15	0.14
Oct 16 - Dec 2016	110.10	104.86	5.24	7.34	0.10	15	0.11
Jan 17 - Mar 2017	133.54	127.18	6.36	7.34	0.12	15	0.13
Apr 17 - Jun 2017	170.07	161.97	8.10	7.34	0.15	15	0.17
Jul 17 - Sep 2017	174.40	166.09	8.31	7.707	0.16	18	0.19
Oct 17 - Dec 2017	176.86	168.44	8.42	7.707	0.16	18	0.19
Jan 18 - Mar 2018	178.73	170.22	8.51	7.707	0.16	18	0.19
Apr 18 - Jun 2018	185.36	176.53	8.83	7.707	0.17	18	0.20
Jul 18 - Sep 2018	186.63	177.74	8.89	8.092	0.18	18	0.21
Oct 18 - Dec 2018	189.82	180.78	9.04	8.092	0.18	18	0.22
Jan 19 - Mar 2019	193.43	184.22	9.21	8.092	0.19	18	0.22
Apr 19 - Jun 2019	193.44	184.23	9.21	8.092	0.19	18	0.22
Jul 19 - Sep 2019	194.21	184.96	9.25	8.497	0.20	18	0.23
Oct 19 - Dec 2019	193.94	184.71	9.23	8.497	0.20	18	0.24
Jan 20 - Mar 2020	193.94	184.71	9.23	8.497	0.20	18	0.24
Apr 20 - Jun 2020	188.68	179.69	8.99	8.497	0.19	18	0.22
Jul 20 - Sep 2020	188.38	179.41	8.97	8.922	0.20	18	0.23
Oct 20 - Dec 2020	185.25	176.43	8.82	8.922	0.20	18	0.24
Jan 21 - Mar 2021	178.70	170.19	8.51	8.922	0.19	18	0.22
Apr 21 - Jun 2021	175.30	166.95	8.35	8.922	0.19	18	0.22
Total							4.03

Source: PHSC records

* Service Tax at the rate of 15 per cent up to June 2017 and GST at the rate of 18 per cent from July 2017 onwards.

- (ii) Similarly, while taking cost of new equipment added during the period April 2020 and June 2021, total cost of equipment including GST was taken to calculate the service charge in place of assessable value (actual cost of equipment without GST) of equipment. This resulted in excess payment of service charges of ₹ 0.11 crore (**Appendix 4.4**).

¹⁰ VAT/CST calculated at the rate of five per cent.

¹¹ As per terms and conditions of agreement, the bid amount shall be annually escalated by a simple interest of five per cent for each subsequent year.

(iii) In case of new assets which were purchased after completion of mapping after expiry of warranty period, it was noticed during test-check of records (July 2018 to September 2019) that addition was made on the basis of value taken while mapping of old/existing equipment instead of actual purchase cost of new equipment which was much higher resulting in excess payment of service charges of ₹ 1.20 crore (*Appendix 4.5*).

The PHSC, while admitting the facts in respect of audit observations at Sr. Nos. (i) and (ii), stated (November 2022) that in new tender, only basic price had been taken without tax/GST for inventory of asset. Further, the Department admitted (December 2022) the facts in exit conference with respect to Sr. No. (iii).

4.5.1.3 Irregular payment to the service provider

As per Clause 7(u) of agreement, the service provider shall repair all non-functional equipment within three months from the date of commencement of the contract/agreement. Scrutiny of records revealed that on completion of mapping of equipment, 4,760 number of equipment valuing ₹ 40.52 crore were found non-functional but the service provider rectified only 351 equipment instead of repairing all the 4,760 equipment during October-December 2016. As such, the contractor failed to repair all the non-functional equipment within the time as provided in the agreement.

It was also noticed that the service provider could repair only 3,181 equipment at the cost of ₹ 27.82 crore during October 2016 to March 2019 and the remaining 1,579 number of equipment valuing ₹ 12.70 crore were not repaired and removed from the list of non-functional equipment (September 2019). Thus, asset management by PHSC was inefficient.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.5.1.4 Non-conducting of annual third-party audit for calibration of equipment

Paragraph 7(k) of agreement provides that Annual Third-Party Audit for calibration of equipment serviced by the service provider shall be carried out by NABL accredited Laboratory, or CEDTI or C-DAC or National Physical Laboratories or any other Government recognized agency at the cost of PHSC. Decision of the PHSC shall be final and binding in respect of any deviations reported by third party Audit and the service provider shall be liable to pay penalties for any default in this regard. As per Paragraph 8(b), the payment was to be released on quarterly basis which *inter alia* included that payment of fourth quarter will be released upon submission of reports of Calibration and Preventive Maintenance Services duly verified by the competent authority.

Scrutiny of records revealed that no third-party audit for calibration of equipment was conducted during the entire contract period from July 2016 to June 2021. However, payments of service charges of ₹ 3.68 crore were made ignoring the terms and conditions of agreement. No documentary evidence was available regarding calibration of equipment done by the service provider. The impact/effect of non-calibration and non-conduct of annual third-party audit thereof has been highlighted in **Paragraph 3.6.2.4 of Chapter-III**.

On being pointed out in audit, the Department while admitting the facts, stated (November 2021 and December 2022) that third party audit was not carried out.

4.5.2 Irregularities in procurement of equipment

4.5.2.1 Excess expenditure on procurement of cardiac equipment

General condition (10b) of DNIT provides that price bids of only those tenders who fulfil all the eligibility conditions on the basis of the details furnished by the tenderer in technical bids will be opened.

Scrutiny of records revealed that PHSC invited (May 2016) tender to rate contract to purchase 122 'Defibrillators'. Five bidders participated in the tendering process, out of which three (L1, L2 and L3) were qualified in technical bid. L1 was declared (February 2017) successful bidder by PHSC who quoted rate of ₹ 0.02 crore per unit. On a representation (March 2017) given by tenderer L2 with regard to the desired technical specification submitted by L1, PHSC cancelled (August 2018) the tender process after one and a half years instead of awarding it to L2 (who then became the L1) at the rate of ₹ 0.02 crore per unit.

PHSC again invited (February 2019) a fresh tender to purchase the said equipment in which L1 bidder of previous tendering process was again declared L1 in this process at the rate of ₹ 0.08 crore per unit with some changes in technical specification. PHSC procured (2019-2021) 39 defibrillators by incurring expenditure of ₹ 3.13 crore after three years.

This resulted in delayed procurement of the equipment and extra financial burden on State exchequer for an amount of ₹ 2.35 crore.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.5.2.2 Unfruitful expenditure incurred on purchase of ventilators for adults and paediatric use

Rule 15.2(b) of Punjab Financial Rules (PFR) provides that purchase must be made in most economic manner and in accordance with definite requirement so that it does not prove unprofitable to the Government. As per Rule 2.10(a)(1) of PFRs, same vigilance should be exercised in respect of expenditure incurred from Government revenues, as a person of ordinary prudence would exercise in respect of the expenditure of his own money.

Scrutiny of records revealed that in DH Ludhiana, 14 ventilators¹² valuing ₹ 2.14 crore were received (April 2019) from PHSC. DH Ludhiana furnished (April 2019) installation report to PHSC showing that all equipment were installed. It was, however, noticed that only nine paediatric ventilators were installed in SNCU and the remaining five adult ventilators were lying in store. Further, all nine installed paediatric ventilators could not be made operational due to non-availability of technician though an extra expenditure of ₹ 0.06 crore was also incurred on their maintenance in June 2021. Besides, four out of five adult ventilators were handed over (June 2020) to a private hospital i.e. Christian Medical College, Ludhiana for treatment of COVID-19 patients referred from DH Ludhiana.

This resulted in idle expenditure of ₹ 2.14 crore on purchase of ventilators due to improper management of equipment.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

4.5.2.3 Delay in installation of medical equipment

Scrutiny of records revealed that PHSC issued (between March 2019 and September 2019) nine supply orders for supply of 28 equipment valuing ₹ 2.92 crore. The equipment were supplied between April 2019 and January 2020 but these were got installed and put to use during the period between December 2019 and November 2020 with delays ranging between 46 and 453 days due to non-readiness of the site at various hospitals (*Appendix 4.6*). Thus, due to non-synchronisation of availability of infrastructure and purchase of equipment, expenditure incurred on equipment before installation remained blocked for the delay period and deprived the patients of intended benefits.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

¹² Five ventilators for Adults: ₹ 0.70 crore; and nine ventilators for Paediatric use: ₹ 1.44 crore.

4.5.2.4 *Non/short implementation of Pradhan Mantri Swasthya Suraksha Yojana at GMCH Patiala*

Under the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) (August 2003) launched with the objective to correct imbalances in the availability of tertiary care hospitals/medical colleges providing super speciality services and improving quality of medical education in India, GoI approved a proposal for construction of Super Speciality Blocks at Government Medical College and Hospital (GMCH) i.e. Rajindra Hospital, Patiala at a cost ceiling of ₹ 150.00¹³ crore (₹120 crore as Centre share and ₹ 30 crore as State share) including civil construction, medical equipment and consultancy charges. PMSSY broadly involved Super Specialty Blocks as Centre of Excellence in areas like Oncology, Nephrology, Neurology, Neurosurgery, Paediatric Surgery, Burns and Plastic Surgery, Cardiology, Cardiothoracic and Vascular Surgery, Urology, Endocrinology and strengthening of existing Departments through procurement and installation of medical equipment and services with a focus on high end equipment such as MRI, CT scan, Linear Accelerators, etc.

As per MoU signed (June 2016) between GoP and GoI for the said project, the State Government committed to create the required posts and deploy the personnel against the posts at the Institution as per scope of upgradation in a time bound manner for the smooth and efficient functioning and utilisation of the Super Speciality Blocks. Further, GoI instructed (July 2017) to begin Post Graduate Courses in Super Speciality Blocks constructed at Government Medical College, Patiala under PMSSY.

Audit noticed that out of ₹ 150 crore, funds of ₹ 126 crore (GoI Share: ₹ 96 crore and State Share: ₹ 30 crore) were released by GoI as well as State Government to the executing agencies¹⁴. Super Speciality Block had been constructed and initially started working (November 2020) by incurring an expenditure of ₹ 60 crore.

However, against the allocated (June 2018) amount of ₹ 56.80 crore for equipment, medical equipment of ₹ 44.62 crore only could be received in GMCH, Patiala (upto June 2022) against the purchase order of ₹ 45.34 crore issued between January 2018 and April 2022. Out of 94 equipment, 15 equipment valuing ₹ 4.08 crore were lying idle in GMCH Patiala

¹³ Civil construction (₹ 82.74 crore); Equipment (₹ 41.80 crore); Services- MGPS, OT and CSSD (₹ 15 crore); Contingency and Consultancy (₹ 1.88 crore); Furniture (₹ 5.08 crore); and IT-Network Infrastructure Plus LAN, etc. (₹ 3.50 crore).

¹⁴ Hospital Services Consultancy Corporation (HSCC) Ltd., Noida for construction of super speciality block and HLL Infra Tech Services (HITES) Ltd., Noida for procurement of equipment and Services viz. MGPS, OT, CSSD, etc.

(*Appendix 4.7*) either due to non-posting of specialised doctors/paramedical staff or non-installation of equipment.

Thus, due to non-posting of teaching staff and non-installation of complete equipment, the services in respect of four departments viz. Neurosurgery, Urology, Nephrology and Preclinical in newly Super Speciality Block could not be made fully functional.

On being pointed out in audit, the Department stated (December 2022) that vacancy for Neurosurgeon had been advertised in newspapers and the date of interview would be fixed soon. The Department, however, did not respond regarding non-deployment of other specialists/paramedics and non-installation of equipment. Thus, the fact remains that due to non-posting of adequate specialised doctors/paramedical staff and/or non-installation of equipment, the requisite healthcare facilities could not be provided to the masses.

4.5.2.5 Non-installation/functioning of equipment/machinery for treatment of cancer patients

(i) Bhabhatron-II machine

The Secretary to Government of Punjab, Department of Medical Education and Research (DMER) requested (December 2014) the Tata Memorial Centre, Department of Atomic Energy (DoAE), Government of India (GoI)¹⁵ for provision of Bhabhatron-II machine - an advanced digital Cobalt therapy machine with Cobalt source to be installed at Government Medical College (GMC), Patiala for treatment of cancer patients. While making the request, the Secretary, DMER assured DoAE (GoI) that requisite infrastructure was available at GMC, Patiala for operating the machine. Accordingly, DoAE, GoI granted (May 2015) financial assistance of ₹ 2.80 crore for the purpose.

Audit of records revealed that the Department, through Punjab Health Systems Corporation, procured (June 2016) the Bhabhatron-II machine from a firm at a cost of ₹ 2.01 crore. The machine was installed in GMC, Patiala between October 2016 and June 2017. However, the same could not be put to use for want of requisite manpower i.e. Radiation Oncologist and Medical Physicist during the period from November 2016 to March 2019.

Mention was made in the Report of the Comptroller and Auditor General of India on Social, General and Economic Sectors (Non-PSUs) - Government of Punjab, for the year ended 31 March 2018 highlighting idle expenditure arising from non-functional machine for treatment of cancer patients (Paragraph 3.10). While discussing the paragraph in Public Accounts

¹⁵ In place of old Theratron 780 machine.

Committee (PAC), the Department assured (December 2021) to run the machine within a month.

Though the requisite manpower was available since April 2019 and all the formalities for source loading from Atomic Energy Regulatory Board (AERB), Mumbai was completed (November 2022) but the machine could not still be put to use due to non-obtaining of license from AERB, Mumbai.

On being enquired (October 2022) about the latest status of the Bhabhatron-II machine, the Department stated (November 2022) that the requisite license would be obtained from AERB after commissioning of the machine. Further, the Department admitted (December 2022) the facts in the exit conference.

Thus, despite giving assurance to PAC, Bhabhatron-II machine had not been made functional (November 2022), which not only rendered the expenditure of ₹ 2.73 crore¹⁶ incurred thereon as idle, but also denied the facility of in-house treatment of advanced cases of cancer for more than six years from its procurement.

(ii) Brachytherapy Machine

In GMCH, Patiala, a Brachytherapy machine¹⁷ of ₹ 0.57 crore¹⁸ was installed (August 2007) in the Cobalt room. Thereafter, the Brachytherapy machine was uninstalled (August 2016) after construction of separate Brachytherapy room in December 2015. However, the same could not be installed in new room as the supplier company intimated in the meeting of High-Powered Committee that the existing model of Brachytherapy machine was not being manufactured and its spare parts would not be available in future. Therefore, upgradation of Brachytherapy machine was required and matter of upgradation of Brachytherapy machine was placed in the meeting of CADA¹⁹ Board (September 2017). Accordingly, PHSC conveyed (January 2020) the approval of funds of ₹ 4.25 crore for upgradation of Brachytherapy machine. Although the new room for installation of Brachytherapy machine had been constructed (December 2015), neither was the old machine installed nor was the machine upgraded (February 2023). Resultantly, 215 patients had to be referred to other hospitals for Brachytherapy between August 2017 and March 2022 and the old machine was lying idle since August 2016.

¹⁶ Payment for cost of machine : ₹ 1.79 crore, installation and commissioning of new machine as well as decommissioning charges of old machine: ₹ 0.19 crore, payment to Board of Radiation & Isotope Technology Mumbai for Cobalt teletherapy source: ₹ 0.75 crore

¹⁷ Brachytherapy machine is used for the treatment of cancer, especially prostate/uterus cancer, by insertion of radioactive implants directly into the tissue.

¹⁸ USD 129000 = ₹ 0.57 crore (calculated taking value of one USD which was equal to ₹ 44.10 in 2005).

¹⁹ Punjab State Cancer and Drug Addiction Treatment Infrastructure Fund (CADA) Board.

GMCH, Patiala stated (November 2022) PHSC had been requested time and again to purchase/upgrade the machine. On being enquired (November 2022) from PHSC, no reply was received. Further, the Department admitted (December 2022) the facts in the exit conference.

4.6 Conclusion

Availability of all essential drugs including drugs under JSSK was not maintained in the test-checked health institutions. Absence of essential drugs forced beneficiaries to look and arrange for these medicines from outside. Moreover, PHSC could not procure its own approved essential drugs. Therefore, procurement and availability of drugs/medicines and other consumables left a lot of scope for improvement for delivery of quality healthcare services to the masses in the State of Punjab. Availability of prescribed essential equipment was also found insufficient in test-checked institutions. Issues such as purchase of drugs from ineligible supplier, non-supply/short supply, delayed supply, loss due to expiry of drugs, accepting drug supply having less shelf life, purchase of vaccine after expiry of rate contract etc. were noticed in the procurement of drugs. In the quality assurance aspect, issues such as issuance and consumption of sub-standard medicines, absence of sample testing for local purchase etc. were noticed and hence, quality was not a priority. Thus, quality control was compromised at every step, for short delivery or non-delivery, no action was taken against violation. Quality assurance also compromised by non-testing/failed testing, supply of expired drugs and again no action was taken against violation.

Further, issues such as excess payment of service charges due to incorrect valuation of equipment and addition of new equipment on old higher value for maintenance, non-conducting third party audit for calibration of equipment, excess/unfruitful expenditure on procurement of equipment, non-installation/utilisation of equipment and non-functional of cancer treatment machine in health institutions were also observed.

4.7 Recommendations

In light of the audit findings, the State Government may consider:

- (i) putting in place a robust mechanism for timely installation and proper functioning of high value equipment for obstacle-free delivery of healthcare services to the patients.*
- (ii) taking suitable steps to address the shortfall of drugs, equipment and other consumables in the healthcare institutions;*
- (iii) fixing accountability in case of supply as well as in quality assurance of Not of Standard Quality drugs;*

- (iv) directing the drug warehouses for purchasing drugs/consumables with longer shelf-life so as to avoid early expiry of drugs and consumables;*
- (v) valuation of equipment as per codal provisions and terms and conditions of the agreement to avoid excess payment;*
- (vi) conducting requisite third-party audit for calibration of equipment to ensure that equipment functions properly; and*
- (vii) maintenance of equipment to reduce the breakdown time of critical equipment and ensuring that the equipment are put to optimal use.*

