

Chapter IV: Drugs, Equipment and Other Consumables

Availability of drugs, medicines, equipment and other consumables constitute vital components for delivering comprehensive health services.

During 2016-22, total expenditure by the Health Department (excluding AYUSH) was ₹ 12,422.85 crore and the expenditure on drugs and consumables was ₹ 370.99 crore (Primary and Secondary level - ₹ 266.76 crore and Tertiary level – ₹ 104.23 crore) which constituted 2.99 *per cent* of the total expenditure on healthcare in the State as discussed in **Para 6.5.2**.

4.1 Availability of drugs and consumables in health institutions (primary and secondary)

According to World Health Organisation (WHO), essential medicines are those that satisfy the priority healthcare needs of a population. They are selected with due regard to disease prevalence and public health relevance, evidence of efficacy and safety and comparative cost-effectiveness. They are intended to be available in functioning health systems at all times, in appropriate dosage forms, of assured quality and at prices that individuals and health systems can afford.

IPHS norms 2012 prescribe availability of 493 drugs/medicines, lab reagents, consumables and disposables under 20 different categories in District Hospitals. Health and Family Welfare Department, Government of Himachal Pradesh issued Essential Drugs List (EDL) comprising a number of essential drugs and consumables from time to time [January 2016 (66 in all health institutions), September 2017 (DH-330, CHC/ CH- 216, PHC- 106 and HSC- 43) and June 2020 (DH/ CHC/ CH- 479, PHC- 216 and HSC- 42)]. The EDL for DHs/ CMOs, CH and CHCs have been grouped into 33 (during 2017-20) and 46 (from 2020-21 onwards) categories. In PHC, these have been grouped into 27 (during 2017-20) and 31 (from 2020-21 onwards) categories. These essential drugs were to be provided free of cost to the patients in all health institutions. The Chief Medical Officer (CMO) of the district purchases the drugs and consumables for all health institutions in the district except DHs, which purchase at their own level.

4.1.1 Availability of essential drugs in selected DHs/ CMOs

The status of availability of drugs as per EDL in the selected DHs and CMOs during the selected months¹ is shown in **Table 4.1**.

Table 4.1: Availability of essential drugs as per State EDL in selected DHs and CMOs

Month and Year	No. of drugs required to be provided as per EDL	Actual availability of drugs				
		CMO/DH	CMO Kinnaur*	CMO Solan	DH Solan	CMO Kangra
12/2018	330	172 (52)	144 (44)	224 (68)	50 (15)	107 (32)
03/2019	330	251 (76)	151 (46)	209 (63)	65 (20)	143 (43)
06/2020	479	267 (56)	142 (30)	231 (48)	95 (20)	155 (32)

¹ Months selected by Audit to ascertain the availability of drugs in health institutions.

Month and Year	No. of drugs required to be provided as per EDL	Actual availability of drugs				
		CMO/DH	CMO Kinnaur*	CMO Solan	DH Solan	CMO Kangra
09/2021	479	254 (53)	201 (42)	281 (59)	110 (23)	232 (48)
Average Availability (per cent)		(58)	(39)	(58)	(20)	(39)

Source: Records of selected DHs and CMOs. Figures in brackets indicate percentage.

Note: Months of 2016 and 2017 were not chosen as notified EDL had only 66 types of drugs for all levels of Health Institutions.

* DH Kinnaur obtains supply from CMO Kinnaur.

From the **Table 4.1**, it can be seen that against the prescribed State EDL, the average availability of drugs and consumables in DHs Kinnaur, Solan and Kangra and CMOs Solan and Kangra ranged between 20 per cent in CMO Kangra and 58 per cent in CMO Kinnaur and DH Solan in the selected months.

4.1.2 Category wise non-availability of drugs in selected DHs/ CMOs

Audit noticed that no drugs were available in three (DH/ CMO Kinnaur and DH Solan) to 12 (CMO Kangra) categories in all the selected four months as detailed in **Table 4.2**.

Table 4.2: Category wise non-availability of drugs in selected DHs and CMOs

Name of health institution	Category wise non-availability of drugs	Number of categories
CMO Kinnaur	Antiretroviral medicines, Diagnostic Radio contrast, Anti Neoplastic & Immuno Suppressant Drugs + Palliative Care	3
DH Solan	Anti-Parkinson medicines, Antiretroviral medicines, Anti-Leishmaniasis Medicines	3
DH Kangra	Antiretroviral medicines, Anti-Leishmaniasis medicines, Contraceptives, Diagnostic Radio contrast, Revised National TB Control Programme/ National Leprosy Eradication Programme, Anti-malarial medicines, Anti Neoplastic & Immuno Suppressant Drugs + Palliative Care, Migraine Prophylaxis, Medicine for de-addiction	9
CMO Solan	Muscle relaxants and cholinesterase inhibitors, Medicines used for De-addiction, Antiretroviral medicines, Anti-Leishmaniasis medicines, Contraceptives, Diagnostic Radio contrast, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti Neoplastic & Immuno Suppressant Drugs + Palliative Care, Medicine affecting coagulation, Medicines for BPH, Anti-Parkinson medicines	11
CMO Kangra	Anti-Parkinson medicines, Muscle relaxants & cholinesterase inhibitors, Antiretroviral medicines, Anti-Leishmaniasis medicines, Contraceptives, Diagnostic Radio contrast, Revised National TB Control Programme/ National Leprosy Eradication Programme, Antimalarial medicines, Anti Neoplastic & Immuno Suppressant Drugs + Palliative Care, Thyroid & antithyroid medicines, Medicines for BPH, Miscellaneous	12

Source: Departmental figures.

From **Table 4.2**, it can be seen that drugs pertaining to the abovementioned categories like medicines for blood pressure & hypertension, contraceptives, general anaesthetic & oxygen, anti-retroviral medicines, anti-leishmaniasis medicines, diagnostic radio contrast etc. were not available in the selected CMOs/DHs during all the test-checked four months. For other categories of medicine, some or all of the drugs were available in one or more selected months.

4.1.3 Availability of essential drugs in selected CHs

The status of availability of EDL in the test-checked CHs during the selected months is shown in **Table 4.3**.

Table 4.3: Availability of essential drugs as per State EDL in selected CHs

Month and Year	No. of drugs required to be provided as per EDL	Actual availability of drugs					
		CH	Chango	Kandaghat	Thural	Jawalamukhi	Shahpur
12/2018	216	50(23)	150(69)	98(45)	9(4)	127(59)	67(31)
03/2019	216	42(19)	126(58)	135(63)	27(13)	150(69)	111(51)
06/2020	479	40(8)	139(29)	161(34)	40(8)	140(29)	101(21)
09/2021	479	38(8)	169(35)	234(49)	36(8)	130(27)	100(21)
Average Availability (per cent)		(12)	(42)	(45)	(8)	(39)	(27)

Note: Months of 2016 and 2017 were not chosen as notified EDL had only 66 types of drugs for all levels of Health Institutions.

Source: Records of test-checked CHs. Figures in brackets indicate percentage.

From **Table 4.3**, it can be seen that against prescribed State EDL, the average availability in the selected CHs ranged between eight *per cent* in CH Jawalamukhi and 45 *per cent* in CH Thural.

4.1.4 Category wise non-availability of drugs in selected CHs

Audit noticed that no drugs were available in three (CH Chango and CH Kandaghat) to 17 (CH Jawalamukhi) categories in all the selected four months as detailed in **Table 4.4**.

Table 4.4: Category wise non-availability of drugs in selected CHs

Name of health institution	Category wise non-availability of drugs	Number of categories
CH Chango	Antimalarial medicines, Thyroid & anti-thyroid medicines and Muscle relaxants & cholinesterase inhibitors	3
CH Kandaghat	Contraceptives, Antimalarial medicines and Muscle relaxants & cholinesterase inhibitors	3
CH Thural	Migraine Prophylaxis, contraceptives, Revised National TB Control Programme / National Leprosy Eradication Programme and Antiretroviral medicines	4
CH Jawalamukhi	Antidotes & other substances used in poisoning, Migraine Prophylaxis, contraceptives, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-retroviral medicines, general anaesthetic & oxygen, local anaesthetic, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, Medicines affecting coagulation, Medicines used to treat gout & disease modifying agents for rheumatoid disorder, Dermatological medicines (Topical), Drugs used in Ophthalmology, solutions correcting water and electrolyte disturbances, Vaccine/ Immunoglobulin, Disinfectants & antiseptics and Miscellaneous	17
CH Shahpur	Migraine Prophylaxis, contraceptives, Revised National TB Control Programme/National Leprosy Eradication Programme, Anti-malarial medicines, Anti-retroviral medicines, general anaesthetic & oxygen, Thyroid & antithyroid medicines, Muscle relaxants & cholinesterase inhibitors, Psychotherapeutic medicines and Miscellaneous	10
CH Baijnath	Antidotes and other substances used in poisoning, Migraine Prophylaxis, Anti-malarial medicines, Local anaesthetic, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, Psychotherapeutic medicines, Medicines affecting coagulation, Scabicides & pediculicides and Miscellaneous	10

Source: Departmental figures.

From **Table 4.4**, it can be seen that drugs pertaining to the abovementioned categories like contraceptives, thyroid & anti-thyroid medicine, migraine prophylaxis, muscle relaxants & cholinesterase inhibitors and antiretroviral medicines, etc. were not available in the selected CHs during all the test-checked four months. For other categories of medicine, some or all of the drugs were available in one or more selected months.

4.1.5 Availability of essential drugs in selected CHCs

The status of availability of EDL in the selected CHCs during the selected months is shown in **Table 4.5**.

Table 4.5: Availability of essential drugs as per State EDL in selected CHCs

Month and Year	No. of drugs required to be provided as per EDL	Actual availability of drugs						
		CHC	Sangla	Pooh	Bachhwai	Majheen	Bir	Syri
12/2018	216	74 (34)	53 (25)	85 (39)	45 (21)	56 (26)	109 (50)	92 (43)
03/2019	216	77 (36)	51 (24)	84 (39)	49 (23)	97 (45)	125 (58)	102 (47)
06/2020	479	79(16)	63(13)	92 (19)	55 (11)	66 (14)	135 (28)	160(33)
09/2021	479	84(18)	115 (24)	105 (22)	66 (14)	75 (16)	123 (26)	206 (43)
Average Availability (per cent)		(23)	(20)	(26)	(15)	(21)	(35)	(40)

Note: Months of 2016 and 2017 were not chosen as notified EDL had only 66 types of drugs for all levels of Health Institutions.

Source: Information supplied by the CHCs. Figures in brackets indicate percentage.

From **Table 4.5**, it can be seen that against required State EDL, the average availability in the CHCs ranged between 15 per cent (CHC Majheen) to 40 per cent (CHC Dharampur) during the selected months.

4.1.6 Category wise non- availability of drugs in CHCs

Audit noticed that no drugs were available in two (CHC Dharampur) to 12 (CHC Majheen) categories in all selected four months as detailed in **Table 4.6**.

Table 4.6: Category wise non-availability of drugs in selected CHCs

Name of health institution	Category wise non-availability of drugs	Number of categories
CHC Sangla	General anaesthetic & oxygen, Migraine prophylaxis, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, contraceptives, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-malarial medicines and Anti-retroviral medicines.	8
CHC Pooh	Migraine Prophylaxis, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-malarial medicines and Anti-retroviral Medicines.	6
CHC Bachhwai	Local Anaesthetics, Migraine prophylaxis, Medicines affecting coagulation, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, contraceptives, Psychotherapeutic medicines, Anti-malarial medicines, Scabicides & pediculicides and Antidotes & other substances used in poisoning.	10
CHC Majheen	General anaesthetic & oxygen, Migraine prophylaxis, Thyroid & anti-thyroid medicines, Muscle relaxants & cholinesterase inhibitors, contraceptives, Drugs used in Obstetrics & Gynaecology, Psychotherapeutic medicines, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-malarial medicines, Anti-retroviral Medicines, drugs used in Ophthalmology, Miscellaneous	12

Name of health institution	Category wise non-availability of drugs	Number of categories
CHC Bir	General anaesthetic & oxygen, Migraine prophylaxis, Muscle relaxants & cholinesterase inhibitors, contraceptives, drugs used in Obstetrics & Gynaecology, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-malarial medicines, Anti-retroviral medicines, Medicines used to treat gout & Disease modifying agents for rheumatoid disorder, Vaccine/ Immunoglobulin and Thyroid and anti-thyroid medicines	11
CHC Syri	Muscle relaxants & cholinesterase inhibitors, Revised National TB Control Programme / National Leprosy Eradication Programme, Anti-malarial medicines and Anti-retroviral Medicines.	4
CHC Dharampur	General anaesthetic & Oxygen and Anti-retroviral Medicines.	2

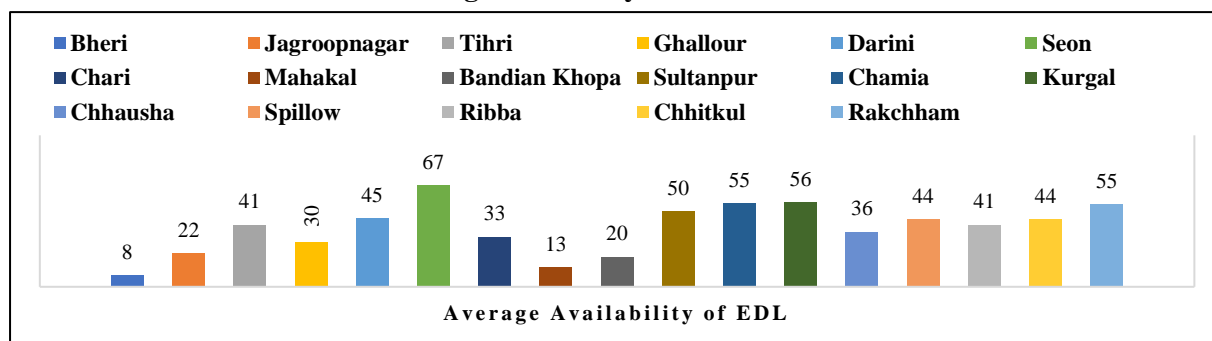
Source: Departmental figures.

From **Table 4.6**, it can be seen that drugs pertaining to the abovementioned categories like general anaesthetics & oxygen, anti-retroviral medicine, thyroid & antithyroid medicine, migraine prophylaxis, Revised National TB Control Programme/ National Leprosy Eradication Programme and contraceptives etc. were not available in the selected CHCs during all the test-checked four months. For other categories of medicine, some or all of the drugs were available in one or more selected months.

4.1.7 Availability of essential drugs in selected PHCs and HSCs

During 2018-21, against the required EDL, all the drugs and consumables were not available at PHC level. Audit observed that in randomly selected months, the average availability of EDL in 17 selected PHCs ranged between eight *per cent* and 67 *per cent* as shown in **Chart 4.1**.

Chart 4.1: Percentage availability of EDL in the selected PHCs



Source: Data provided by the selected PHCs.

Audit noticed that all prescribed essential drugs were not available in one to seven categories² out of the required categories² in all the selected four months as detailed in **Table 4.7**.

² I-Local Anesthetic & Oxygen, II-Local Anesthetics, III-Analgesics, antipyretics, non-steroidal anti-inflammatory medicine, IV-Anti-allergic and medicines used in anaphylaxis, V-Antidotes and other substances used in poisoning, VI-Anticonvulsants/ Anti-epileptics, VII-Intestinal Anti-helminthics, VIII-Antibacterial, IX-Antifungal medicines X-Antiviral medicines, XI-Antiprotozoal medicines, XII-Antianaemia medicines, XIII-Medicines affecting coagulation, XIV-Cardiovascular medicines, XV-Dermatological medicines (Topical), XVI-Scabicides and pediculicides, XVII-Gastrointestinal medicines, XVIII-Insulins and other antidiabetics, XIX-Anti-Infective Agents in Ophthalmology, XX-ENT, XXI-Contraceptives, XXII-Drugs Used in Obstetrics & Gynaecology, XXIII-Psychotherapeutic medicines, XXIV-Medicines acting on the respiratory tract, XXV-Solutions correcting water, electrolyte disturbances, XXVI-Vitamins and minerals, XXVII-Vaccines & Immunoglobulins, XXVIII-Miscellaneous, XXIX-Disinfectants & antiseptics, XXX- Revised National TB Control Programme/National Leprosy Eradication Programme and XXXI-Antimalarial medicines.

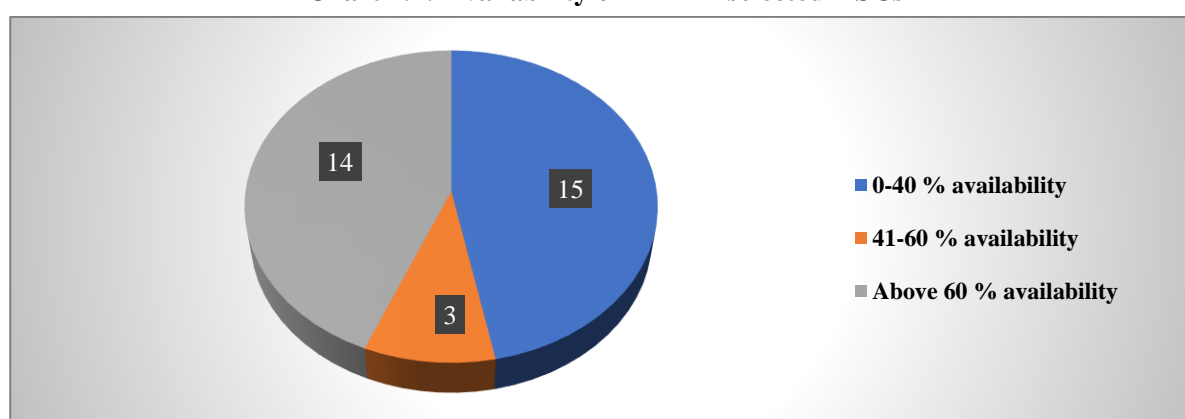
Table 4.7: Category-wise (serial number) non-availability of drugs in the selected PHCs

Name of PHC	Category wise non-availability of drugs	Number of categories
PHC Bheri	V, VI, VII, XIII, XV, XXII, XXVII	7
PHC Jagroopnagar	II, V, XXII, XXV, XXVII, XXVIII	6
PHC Tihri	II, XIII, XXII, XXVIII	4
PHC Ghallour	II, V, VI, XIII, XXII, XXV, XXVIII	7
PHC Darini	II, XIII, XXII	3
PHC Seon	II	1
PHC Chari	V, X, XIII, XIX, XX, XXII	6
PHC Mahakal	II, V, IX, XIII, XXII, XXV, XXVIII	7
PHC Bandian Khopa	II, V, VI, XIX, XXII, XII, XXVIII	7
PHC Sultanpur	XIII, XXII	2
PHC Chamia	XIII	1
PHC Kurgal	XIII, XXII	2
PHC Chhausha	VI, X	2
PHC Spillow	XXII, XXV	2
PHC Ribba	II, XIII, XXVIII	3
PHC Chhitkul	XXII	1
PHC Rakchham	XXII	1

From **Table 4.7**, it can be seen that drugs pertaining to the above-mentioned categories like local anaesthetics, antidotes and other substances used in poisoning and medicines affecting coagulation were not available in selected PHCs during all the test-checked four months. For other categories of medicine, some or all of the drugs were available in one or more selected months.

Against different types of drugs and consumables required to be available as per State EDL, the percentage of availability ranged between zero (HSC Boh) to 88 per cent of essential drugs at the time of audit in 32 selected HSCs. Availability of drugs as per EDL in HSCs has been shown in three ranges in **Chart 4.2**.

Chart 4.2: Availability of EDL in selected HSCs



Source: Data provided by the selected HSCs.

To summarise, there was shortage of drugs and consumables against EDL during the test-checked months in the selected health institutions ranging as follows:

CMOs/DHs: 24 per cent to 85 per cent, **CHs:** 31 per cent to 96 per cent, **CHCs:** 42 per cent to 89 per cent, **PHCs:** 33 per cent to 92 per cent, **HSCs:** 12 per cent to 100 per cent (during the time of audit).

Thus, the required drugs and consumables as per the EDL were not available in all the selected health institutions. There was shortage of drugs and consumables against EDL at secondary level and primary level health institutions. Further, patient surveys revealed non-availability of drugs in both OPD and IPD. Non-availability of essential drugs deprived patients of the intended healthcare as a result of which they would have been compelled to purchase medicines from the market, thereby increasing out-of-pocket expenditure on healthcare.

4.2 Availability of drugs and consumables in MCHs (tertiary level)

In MCHs, EDL had not been prescribed by the State Government. However, EDL required to be provided in the DHs was compared with the actual availability of drugs and consumables in MCHs.

In RPGMC Kangra, it was noticed that in the selected months³ availability of drugs and consumables was in the range of 120 (36 per cent) to 177 (37 per cent) against the requirement of EDL prescribed for DH for the respective months. In IGMC, it was noticed that 41 (nine per cent) out of 479 drugs and consumables were not available on the date of audit (June 2022).

When category-wise availability was analysed, Audit noticed that:

- In RPGMC, Kangra all drugs were not available in six categories (Migraine Prophylaxis, Contraceptive, Revised National TB Control Programme/National Leprosy Eradication Programme, Anti-malarial medicines, Anti-retroviral medicines and Anti-Leishmaniasis medicines) in all selected four months.
- In IGMC, Shimla category-wise record of drugs was not maintained. Therefore, Audit could not ascertain the category-wise non-availability of drugs.

4.3 Stock-out position of essential drugs in the selected health institutions (primary and secondary)



Continuous availability of essential drugs in health institutions plays an important role in promoting access to and utilisation of health services. On the other hand, frequent stock-out of drugs in health institutions creates distrust in healthcare providers and contributes to low utilisation of the Government healthcare system, also forcing the patients to incur out-of-pocket expenditure.

In selected CMOs and DHs, stock of 19 to 32 drugs (out of 100 drugs randomly selected) were not available for periods ranging from 11 to 1,422 days as shown in **Table 4.8**.

It was noticed that the drugs with major duration of stock out period were those used for treatment of glaucoma (777 days), fungal disease (986 days) and inflammation (1,422 days).

³ Selected month- number of available drugs: 12/2018-120, 03/2019-173, 06/2020-171 and 09/2021-177.

Table 4.8: Status of stock out position of essential drugs as per State EDL in selected District Stores of CMOs

Name of the store	Number of drugs	Period of stock out
CMO store, Kinnaur	20	40 to 335 days (except in one case of 777 days)
CMO store, Kangra	30	18 to 427 days (except in one case of 986 days)
CMO store, Solan	32	61 to 560 days
DH, Kangra	19	11 to 193 days (except in one case of 1,422 days)

- In four⁴ out of six selected CHs, 10 to 12 drugs (out of 80 drugs selected randomly) were not available in stock for periods ranging from four to 301 days. The position of CH Jawalamukhi and CH Shahpur could not be ascertained as no stock registers were maintained. It was noticed that drugs with major duration of stock out period were those used to control bleeding after delivery (301 days), treat high blood pressure (239 days), treat or prevent certain infections caused by bacteria, sexually transmitted disease, typhoid fever, infectious diarrhoea (133 days), etc.
- In eight selected BMOs and CHCs (four BMOs and four CHCs), 10 to 29 drugs (out of 80 drugs selected randomly) were not available in stock for periods ranging from four to 1,070 days. It was noticed that drugs with major duration of stock out period, were those used to treat muscle cramps (1,070 days), reduce bad cholesterol (1,009 days), treat anxiety (511 days) etc.
- In 10 out of 17 selected PHCs, 10 to 21 drugs (out of 50 drugs selected randomly) were not available in stock for periods ranging from two to 1,481 days. It was noticed that drugs with major duration of stock out period, were the drugs used for treatment of certain infections (957 days), diagnosis or treatment of urinary tract infection, reproductive organ failure, prostate infection, stomach infection (895 days), deworming (1,481 days) etc.
- In 15 out of 32 selected HSCs, five to 26 drugs (out of 50 drugs selected randomly) were not available in stock for periods ranging from seven to 2,481 days. It was noticed that drugs with major duration of stock out period were those used for treatment of infections caused by protozoans & bacteria (2,481 days), skin infections, rosacea and mouth infections, including infected gums and dental abscesses (595 days), irritable bowel syndrome (691 days) etc.

Thus, from the above it is evident that all essential drugs and consumables were not available in the selected health institutions and considerable number of drugs were not in stock for a long time.

Further, Audit noticed that there was shortage of drugs in the selected health institutions, despite availability of funds to procure free medicines in two out of three selected CMOs as ₹ 1.54 crore⁵ was returned to NHM by CMO Kangra and CMO Kinnaur during 2019-21.

⁴ CH Thural (12 drugs for four to 301 days), CH Baijnath (10 drugs for 53 to 158 days), CH Kandaghat (10 drugs for four to 80 days), CH Chango (10 drugs for 39 to 162 days).

⁵ CMO Kangra: 2019-20: ₹ 0.16 crore, 2020-21: ₹ 1.30 crore; CMO Kinnaur: 2020-21: ₹ 0.08 crore.

4.3.1 Stock-out position of essential drugs in selected MCHs (tertiary level)

In selected MCHs, 20 to 61 drugs were not in stock for periods ranging between 21 to 744 days as shown in **Table 4.9**.

Table 4.9: Status of stock-out position of essential drugs as per State EDL in selected MCHs

Name of the store	Number of drugs	Period of stock-out (in days)
IGMC Shimla ⁶	61	21- 744
RPGMC Kangra	20	43-459

From **Table 4.9**, it can be seen that 20 to 61 drugs were not in stock for periods ranging between 21 to 744 days in the selected MCHs. It was noticed that drugs with major duration of stock out period were those used for treatment of anaemia (744 days), high blood pressure (596 days), heavy menstrual bleeding (630 days), type 2 diabetes (459 days) etc. If a medicine was not available for the patient at the time of requirement, regardless of the reason, the patients will either go without treatment, choose an alternative treatment, delay treatment, or incur out-of-pocket expenses.

4.4 Survey of patients - Provision of essential medicines prescribed by the doctors in health institutions (all levels)

4.4.1 Outpatient Department (OPD)

Audit carried out patient survey of 357 OPD patients in the selected health institutions regarding provision of free essential drugs. It was observed that overall 74 *per cent* patients received free medicines as detailed in **Table 4.10**:

Table 4.10: Details of EDL provided to the patients surveyed by Audit

Health institutions	Number of patients surveyed	Number of patients who were provided all free medicines	Number of patients who were provided some or no free medicine
MCHs	30	20 (67)	10 (33)
DHs	45	20 (44)	25 (56)
CHs	60	41 (68)	19 (32)
CHCs	67	59 (88)	8 (12)
PHCs	155	125 (81)	30 (19)
Total	357	265 (74 per cent)	92 (26 per cent)

From **Table 4.10**, it can be seen that overall 26 *per cent* patients were not provided all/some of the prescribed medicines due to non-availability as detailed in **Para 4.1** and **4.2**.

4.4.2 Inpatient Department (IPD)

Audit carried out patient survey of 95 IPD patients in the selected health institutions (upto CH) regarding provision of free drugs. It was observed that overall 79 *per cent* patients received free medicines in health institutions, as detailed in **Table 4.11**.

Table 4.11: Details of EDL provided to the patients surveyed by Audit

Health institutions	Number of patients surveyed	Number of patients who were provided all free medicine	Number of patient(s) who were provided few or no free medicines
MCHs	30	29 (97)	1 (3)
DHs	45	33 (73)	12 (27)
CHs	20	13 (65)	7(35)
Total	95	75 (79 per cent)	20 (21 per cent)

⁶ Including Kamla Nehru State Hospital (Maternity wing of IGMC).

From **Table 4.11**, it can be seen that overall 21 *per cent* patients were not provided all/ some of the prescribed medicines due to non-availability of EDL as detailed in **Para 4.1** and **4.2**.

4.5 Procurement of drugs

The Department had procured drugs prescribed in EDL through Himachal Pradesh State Civil Supplies Corporation (HPSCSC) till June 2017.

The State Government notified a new purchase policy (March 2017), in which it was stated that the State Procurement Cell (SPC), which was constituted in November 2016, shall place supply orders with approved suppliers on the basis of approved rate contracts. However, SPC remained non-functional.

From July 2017 to October 2017, medicines were procured locally by the health institutions after completing codal formalities. Thereafter, instructions were issued (November 2017) authorising CMOs to undertake procurement directly from Central Public Sector Enterprises (CPSEs), Jan Aushadhi stores, other approved firms with whom institutions like IGMC/ Employees' State Insurance Corporation (ESIC) had finalised rate contract (RC), or through open tendering in cases where items were not available with these sources.

4.5.1 Delay at CMO level in approving the requirements of drugs and consumables

There is a practice in the Department at district level for convening a meeting of District Purchase Committee for finalisation of purchases after receipt of the requirement from lower health institutions.

Details of time taken in approving the purchase of drugs and consumables of different health institutions of Kinnaur and Kangra districts and placing of supply order is shown in **Table 4.12**:

Table 4.12: Time taken for approval by Purchase Committee and placing of purchase order

District	Name of Health Institutions/ BMOs	Date of sending the requirements of drugs and consumables	Date of approval by Purchase Committee	Time taken (days)	Date of sending of supply order	Time taken for supply order after approval by Purchase Committee
Kinnaur	BMO, Nichar	28/04/2020	19/06/2020	51	02/07/2020, in some cases, 22/07/2020 and 23/07/2020	13 to 33 days
	BMO, Sangla	29/04/2020		50		
	CHC, Pooh	06/11/2019		234		
	BMO, Sangla	27/08/2020	07/09/2020	11	23/09/2020 and 24/09/2020	16 to 17 days
	CHC, Bhabanagar	27/08/2020				
	BMO Pooh	21/08/2020				
Kangra	BMO, Tiara	18/06/2016	16/07/2016	27	No records available	
	BMO, Thural	08/06/2016	16/07/2016	37	--do--	
	BMO, Gangath	21/06/2016	16/07/2016	24	--do--	
	BMO, Gopalpur	13/11/2017	22/11/2017	8	--do--	
	BMO, Shahpur	10/11/2017	22/11/2017	11	--do--	
	CH Kangra	07/07/2018	26/02/2019	232	--do--	

From **Table 4.12**, it can be seen that:

- Eight to 234 days were taken in approving the requirement for purchase of drugs and consumables of different health institutions of Kinnaur and Kangra districts.
- 13 to 33 days were taken for placing supply order after approval of the Purchase Committee in Kinnaur district. In Kangra district, records were not available regarding details of placing the supply orders after approval by the Purchase Committee.

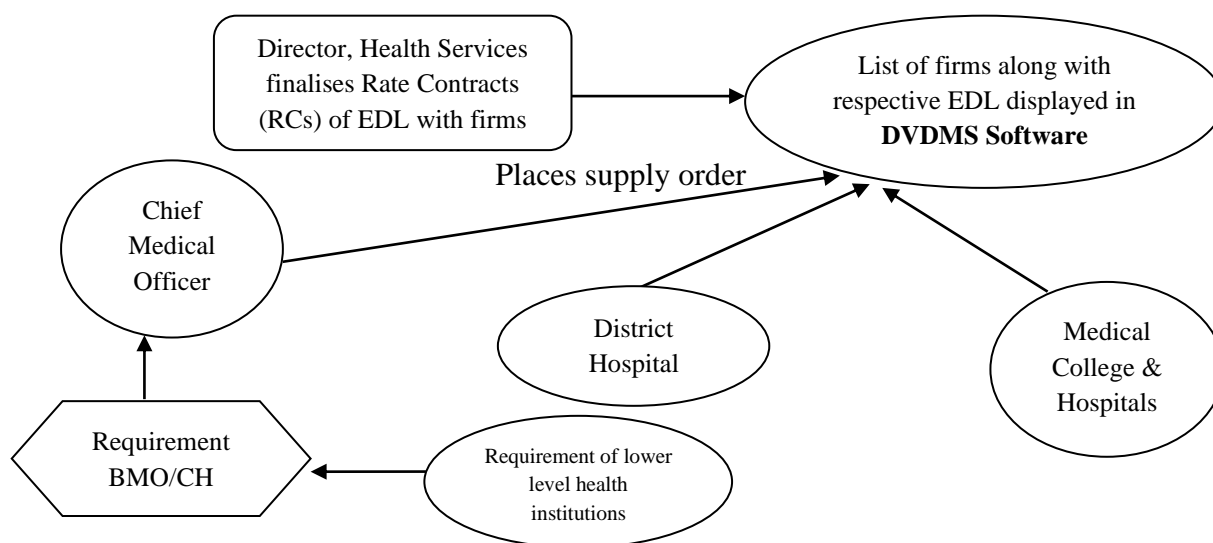
Thus, delay on the part of the CMO/committee in approving the demand and placing of supply order led to shortage of medicines in health institutions/BMOs stores and had an adverse effect on patients availing the facility, as stated in **Paras 4.1 to 4.3**.

4.6 Drug and Vaccine Distribution Management System (DVDMS)

DVDMS software is one of the efficient ways of maintaining drug supply chain management in the healthcare institutions, which is an essential component of effective and affordable healthcare services. DVDMS comprises Drug and Vaccine Supply Chain Management that deals with purchase orders, inventory management and distribution of various drugs etc. DVDMS data of the entire state is monitored at the Directorate level. The data of all health institutions of the districts is maintained by their respective CMOs, while a few district hospitals maintain the drug supply management on their own.

Rate Contract (RC) firms were decided by DHS based upon the tendering process on yearly basis. The RC firms are entered in DVDMS software. The requisition/indents of the drugs and consumables are received from lower health institutions by BMOs and consolidated at district level (CMO). Based upon the requirement CMOs in-charge of the DHs and MCHs place orders directly on DVDMS. The consolidated supply orders are sent to the registered RC firms after approval of the Purchase Committee. Flow chart of the process of procurement of EDL through DVDMS is shown in **Chart 4.3**.

Chart 4.3: Process of procurement of drugs and consumables from DVDMS



On scrutiny of DVDMS data of the State, the following observations were noticed:

4.6.1 Delay in supply of 452.64 lakh quantity of drugs and consumables

As per the instruction dated 07/03/2019 issued by the Director, Health Services, Himachal Pradesh, if a supplier fails to deliver any or all goods within the time period specified in the contract (45 days for drugs and 60 days for injection and vials), the purchaser shall deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 *per cent* of the delivered price of the delayed goods for each week of delay subject to a maximum of 10 *per cent* if extension has been granted, otherwise the supply order may stand cancelled/terminated after 90 days.

On scrutiny of DVDMS reports, it was noticed that during 2018-19 to 2021-22, the suppliers did not supply the drugs and consumables within the stipulated time as detailed in **Table 4.13**:

Table 4.13: Drugs and consumable items not supplied within the permissible time by supplier

Health Institutions	Quantity of drugs and consumables (in lakh)	Delay in supply
CMO, Bilaspur	4.42	Upto 95 days
CMO, Chamba	74.42	Upto 96 days
CMO, Keylong	14.90	Upto 196 days
CMO, Kinnaur	23.65	Upto 141 days
CMO, Kangra	31.03	Upto 115 days
CMO, Kullu	20.91	Upto 70 days
CMO, Mandi	24.54	Upto 48 days
CMO, Shimla	21.37	Upto 49 days
CMO, Sirmaur	30.88	Upto 104 days
CMO, Solan	79.81	Upto 75 days
CMO, Una	30.76	Upto 89 days
IGMC (including KNSH)	49.71	Upto 93 days
RPGMC	46.24	Upto 482 days
Total	452.64	

Source: DVDMS records.

From **Table 4.13**, it can be seen that delay in supply of drugs and consumables by the suppliers ranged from 48 days to 482 days against the prescribed period.

It was further noticed that three selected CMOs⁷ and two MCHs⁸ did not take steps to impose penalty for delay in supply of drugs as per terms and conditions of the supply orders.

In reply, Director, Health Services stated (August 2022) that penalties were being levied by CMOs/MS. The reply was not acceptable as no action in this regard had been taken as noticed in the three test-checked CMOs and two MCHs.

4.6.2 Non-supply of drugs and consumables by firms

As per the instruction dated 07/03/2019 issued by Director Health Services, Himachal Pradesh, in the event of non-supply of drugs and consumables by the supplier due to any

⁷ CMO Kinnaur, CMO Solan and CMO Kangra.

⁸ RPGMC Kangra and IGMC Shimla.

reason, penalty will be imposed on the supplier apart from forfeiture of security deposit. Further, the excess expenditure over and above the contract price incurred by the Department by purchasing the drugs from the open market was to be recovered from the firm.

During scrutiny of the data of DVDMS of primary and secondary level health institutions, it was observed that 218.45 lakh quantities of drugs and consumables worth ₹ 650.77 lakh were not supplied by the suppliers during 2018-21 (up to November 2021). In addition to the above, at tertiary level, 184.02 lakh quantity of drugs (IGMC- 41.83 lakh and RPGMC- 142.19 lakh) valuing ₹ 12.10 crore were not supplied by the firms for the period 2020-22. No action in this regard was taken by the DHS against the firms.

The DHS, in reply, stated that the firms did not supply orders due to reasons like the supply orders getting auto cancelled after completion of 60 days and less availability of drugs/consumables.

The reply was not acceptable as no action had been taken for recovery of excess expenditure, if any, incurred over and above the contract price for purchase of drugs from other suppliers. Audit could not work out the excess expenditure on the purchase of drugs from the other firms.

4.6.3 Purchase of drugs with less shelf life

As per the instruction dated 07/03/2019 issued by Director, Health Services, Himachal Pradesh, the shelf life of the drugs shall be strictly fixed for a period not less than the period prescribed under Schedule P of “Drugs and Consumables Act, 1945”. At the time of receipt of the drugs, the life of the drug shall not have passed more than 1/6th of the effective/useful life of the drug counted from the date of manufacturing or 60 days, whichever is higher.

During test check of the records of selected CMOs, it was noticed that at the time of receipt of the drugs in the district store, complete details like manufacturing date, expiry date and batch numbers were not mentioned in the stock registers, in absence of which the shelf life as prescribed above could not be worked out. However, some details were worked out by Audit, and it was noticed that in CMO Solan, 55 types of medicines (9.55 lakh quantity) were procured with shelf life ranging between 2 to 17 months⁹ and 11 types of drugs (4.16 lakh quantity) were procured with a shelf life of less than 10 months. Hence, there is a high possibility of drugs getting expired before dispensing them to patients or else a rush to dispense the drugs.

Thus, improper procurement and lack of verification of supplies received from suppliers resulted in reduced shelf life of essential drugs. Thus, procurement of drugs with limited shelf life resulted in expiry of medicines as discussed in **Para 4.6.4**.

4.6.4 Expiry of drugs

Audit observed from the data of DVDMS portal that:

- 341.59 lakh quantities of drugs and consumables expired during 2017 to 2021 in health institutions of primary and secondary levels.

⁹ Average life of medicine is considered as 24 months.

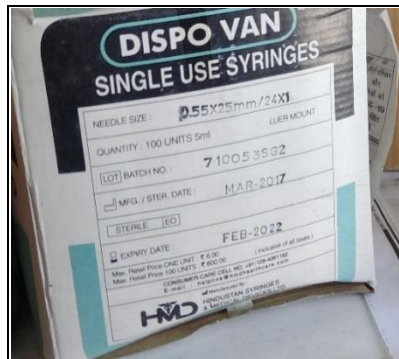
- 77.21 lakh quantity of drugs expired in three selected districts and an MCH during the same period as detailed in **Table 4.14**.

Table 4.14: Expiry of drugs at health institutions

Name of the health institution	Quantity of drugs expired (in lakh)
CMO, Solan	36.42
CMO, Kangra	33.97
CMO, Kinnaur	6.80
KNSH (Maternity wing of IGMC) Shimla	0.02
Total	77.21

Source: Departmental figures.

Audit test-checked the records of selected health institutions and noticed that though DVDMS showed the date of expiry of the medicine, physically it was not shown in the records as all the required entries like expiry date and batch number were not entered in the stock registers. As a result, Audit also could not work out the details of expired medicines in the selected health institutions due to improper maintenance of records. Further, out of all test-checked health institutions, Audit noticed in PHC Charri that some expired medicines were lying in the drug store as shown in **Pictures 4.1** and **4.2** but these expired medicines were not shown as expired in the stock register. This entails the risk of issuing expired or close-to-expiry medicines to the patients. In PHC Mahakal under BMO Mahakal, it was noticed that expired medicines were burnt outside the PHC as shown in **Picture 4.3**, however in the stock register there was no record of these expired medicines. Hence, the records in the stock register were not reliable.



Picture 4.1: Expired single use syringes in PHC Charri



Picture 4.2: Expired drugs in PHC Charri



Picture 4.3: Burning of expired medicine outside PHC Mahakal

In reply, the Deputy Director, DHS Shimla admitted (August 2022) that some medicines/drugs had expired in the field units. Further, it was stated that there is an alert system in the DVDMS regarding expiry of medicines.

The reply is not tenable as there were variations in the information maintained in the stock registers and DVDMS. Further, there were discrepancies in the information updated on DVDMS as discussed in **Para 4.6.5**.

4.6.5 Variations between DVDMS data and physical stock register

To ascertain the correctness of data/information available in the DVDMS, Audit compared the stock position of medicines in DVDMS and stock registers of the 16 selected health institutions. It was observed that the data shown in the DVDMS varied with that of the actual

data in stock registers in the respective health institutions. The details are shown in **Table 4.15**.

Table 4.15: Variation of DVDMS data and physical stock register

Name of the health institute	Number of test-checked medicines	Numbers of items in which variations found	Reason
RPGMC Kangra	20	20	Non-posting of indent in the DVDMS as well as stock registers
IGMC Shimla + KNSH Shimla	29	29	
CMO, Kangra	10	6	
DH, Kangra	10	7	
BMO, Thural	10	8	
CH, Thural	10	10	
CH, Jawalamukhi	10	10	
CH, Shahpur	12	11	
CH, Baijnath	10	7	
CHC, Bir	10	10	
PHC Bandian Khopa,	11	3	
PHC, Mahakal	10	10	
PHC, Darini	11	5	
PHC, Charri	10	5	
PHC, Seon	11	11	
HSC, Tara	9	9	
Total	193	161 (83.42 per cent)	

From **Table 4.15**, it can be seen that there was variation in 83.42 *per cent* of medicines in the DVDMS data out of 193 test-checked medicines.

In reply, heads of the selected health institutions stated that variation was due to non-updating of the data regularly due to heavy rush of work and shortage of staff.

The reply was not acceptable as the Department was required to update this data regularly to show the correct position in DVDMS. Not doing so defeated the very purpose of the DVDMS application.

In the Exit Conference, Secretary (Health) to the Government of Himachal Pradesh stated that at health institutions, adequate trained staff was not available for updating the information of drugs issued (to patients) on DVDMS, due to which issued drugs were also captured as expired drugs. It was also stated that directions will be issued for immediate data entry in DVDMS at the time of issue of medicine to other health institutions.

4.7 Management of dispensing and storage of drugs and consumables

4.7.1 Non-supply/Short supply from CMO/BMO Store to lower level health institutions

Audit checked the records of CMO/BMO pertaining to requirement sent by the BMOs/CHs/CHCs/PHCs and it was noticed that medicines were not issued to the BMOs/CHs/CHCs/PHCs as per their requirement. Details of non-supply and short supply of medicines to the lower health institutions have been shown in **Appendix 3**.

From the details, it was noticed that:

- In 3 selected CMOs (Kinnaur, Solan and Kangra), against the requirement of 19.22 lakh quantity of the test-checked 44 medicines, only 6.96 lakh (36.21 *per cent*) quantity of drugs were issued, thereby resulting in short supply of 12.26 lakh (63.79 *per cent*) quantity of medicines to BMOs/CHs/CHCs/PHCs. Similarly, in DH Kangra, against the requirement of 3,580 quantities of test-checked 10 medicines, only 898 quantities of drugs were issued, resulting in short supply of 2,682 (74.92 *per cent*) quantity of medicines to the different wards of the DH. Similarly, in two¹⁰ out of eight selected BMOs and two¹¹ out of six selected CHs, against the requirement of 0.96 lakh quantity of medicines, 0.78 lakh medicines were not issued to the lower health institutions/wards.
- In CMO Kangra and CMO Kinnaur, despite having availability of 5.97 lakh quantity of three medicines (Tab Domperidone, Tab Antacid, Cap Amoxicillin) medicines were not issued to the lower health institutions (BMO Mahakal, CHC Pooh and PHC Kalpa). Similarly, in BMO Thural and CH Shahpur, 0.05 lakh quantity of medicines were demanded by the lower health institutions but the same were not issued despite availability of 1.70 lakh quantity of these medicines in the stores.

CMOs/BMOs stated that distribution of medicines was made considering the demand of other health institutions and their patient load.

- In five out of 17 selected CMOs/BMOs/CHs, 2.82 lakh quantity of 115 medicines were demanded by the lower health institutions/wards but these medicines were not supplied due to non-availability in the respective stores.

4.7.2 Non-accounting of medicines and consumables in the stock register

As per Para 164 of Himachal Pradesh Financial Rules, 2009 of the Government of Himachal Pradesh, all the goods purchased/received are required to be entered in the stock registers maintained in the Department.

Audit noticed from the stock registers of 16¹² out of 62 selected health institutions that 42,437 medicines were issued to OPD/IPD of the health institutions, out of which only 10,451 medicines were accounted for in the stock registers. Thus, quantities of 31,986 number of medicines were not accounted for in the stock registers during 2016-21.

Non-accounting of medicines and consumables in the stock registers has the associated risk of pilferage of medicines as well as inability to estimate requirement for further procurement in a timely manner. Maintaining a computerised stock register will enable accounting for the receipt and issue of medicines as well as monitor the life of the medicines. Health institution wise details of medicines checked by Audit, quantity issued and quantity accounted for in the stock registers is shown in **Appendix 4**.

¹⁰ BMO Thural and BMO Jawalamukhi

¹¹ CH Shahpur and CH Jawalamukhi

¹² CHs - four, CHCs - two, PHCs - seven and HSCs - three.

In reply, in-charge of the health institutions stated (October 2021- June 2022) that entries could not be made due to shortage of staff and in future entries would be made. However, the fact remains that accounting of the medicines could not be ensured.

4.7.3 Prescription Audit

Government of India, Ministry of Health and Family Welfare, vide D.O.No.7(13)2014-NHM-I, dated 18/04/2017 had issued notification to the doctors to prescribe generic medicines. Through this notification, clause 1.5 of the Indian Medical Council (Professional Conduct, Etiquette, and Ethics) Regulations, 2002, has been amended which now reads as “every physician should prescribe drugs with generic names legibly and preferably in capital letters and he/she shall ensure that there is a rational prescription and use of drugs.”

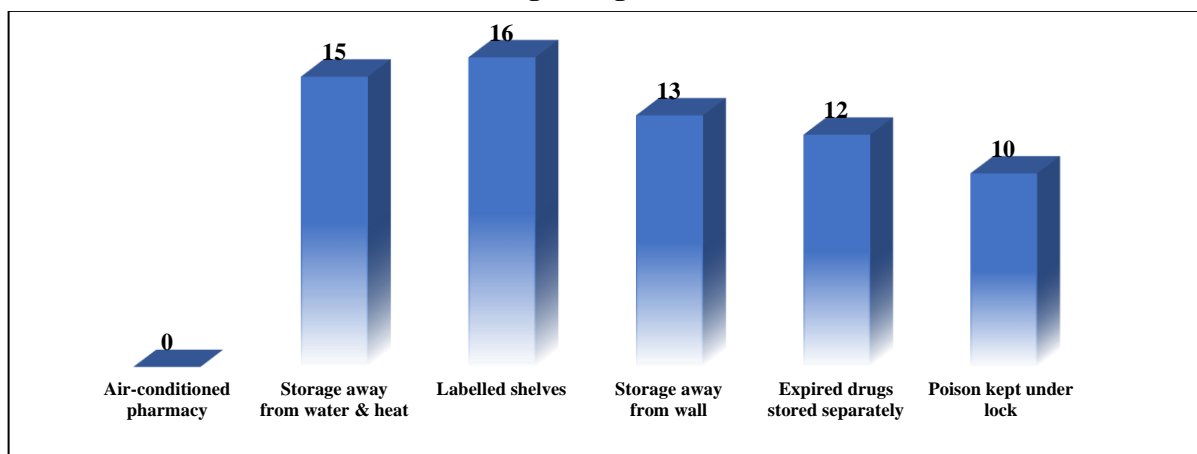
Audit noticed that in the reports of prescription audit¹³ conducted by the health institutions, the doctors were prescribing generic medicines. However, during audit, 97 prescription slips issued to the patients were randomly checked and it revealed that in 47 prescription slips, non-generic medicines were prescribed in seven selected health institutions¹⁴. Further, the names of some of the medicines in the prescription slips were not legible and were not written in capital letters in most of the prescriptions. Thus, it is evident that the prescription audit was not conducted properly by the health institutions.

4.8 Storage of drugs

The 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 the patients. The medicines obtained by the health institutions must be stored in prescribed conditions to ensure that the quality of the medicine does not deteriorate.

The norms and parameters prescribed in the said rules were however not adhered to as noticed during joint physical inspection. The details of deficiencies in storage facilities in selected health institutions (3 DHs, 6 CHs and 7 CHCs) are given in **Chart 4.4**.

Chart 4.4: Parameters followed in drug storage in the test-checked health institutions (16)



¹³ A prescription audit is a part of the holistic clinical audit and is a quality improvement process that seeks to improve patient care and outcomes through a systematic review of prescriptions against explicit criteria and implementation of change. It is conducted by the Department/health institution.

¹⁴ DH Solan (eight out of 22), DH Kangra (16 out of 20), CH Thural (four out of 10), CH Shahpur (two out of 10), CH Jawalamukhi (four out of 10), CH Baijnath (one out of 10) and MCH, Kangra (12 out of 15).

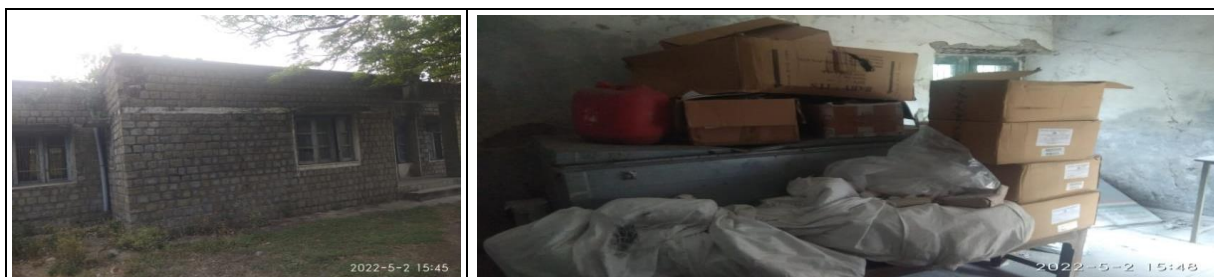
From **Chart 4.4**, it can be seen that none of the health institutions were having air-conditioned pharmacy. In 13 out of 16 health institutions, drugs were stored away from the walls, in 12 health institutions expired drugs were stored separately, and in 10 health institutions poison was kept under lock. Joint physical inspection revealed that drugs were kept on the floor (**Pictures 4.4 and 4.5**) and on the stairs (**Picture 4.6**).

Pictures 4.4 to 4.8: Deficiencies in storage of drugs in selected hospitals



Pictures 4.4, 4.5 and 4.6: Storage of medicines and consumables in warehouse CMO Kangra, CH Baijnath, CMO Kinnaur

Drugs in BMO Mahakal were kept in an abandoned building due to shortage of space as shown in **Pictures 4.7 and 4.8**:



Pictures 4.7 and 4.8: Medicines received from CMO Kangra kept in room of the abandoned building due to shortage of space in the office of the BMO, Mahakal

4.9 Medical equipment

Availability of medical equipment has been prescribed in IPHS norms 2012, for each level of health institutions, keeping in mind the assured service recommended for various grades of health institutions. During 2016-22, total expenditure by the Health Department (excluding AYUSH) was ₹ 12,422.85 crore and the expenditure on procurement of machinery and equipment was ₹ 366.66 crore which constitutes 2.95 *per cent* of the total expenditure on healthcare in the State as discussed in **Para 6.5.2**.

The Additional Chief Secretary (Health) to the Government of Himachal Pradesh, in January 2019, notified the “Procurement Policy” for purchase of essential equipment and machinery in the Department of Health and Family Welfare. Himachal Pradesh Health Procurement Cell (HPHPC) was notified as the “procurement agency” for centralised purchase.

The following observations are made regarding deficiencies in procurement/availability of medical equipment.

4.9.1 Shortfall in availability of medical equipment

4.9.1.1 District Hospitals

As per IPHS norms 2012, different types of equipment are required under 25 different categories in DHs. Depending upon the bed strength, some of the equipment are labelled as desirable and the remaining as essential. Audit examined availability of required types of essential equipment under 14 different categories against IPHS norms 2012 in the test-checked DHs and the findings are shown in **Table 4.16**.

Table 4.16: Availability of required types of equipment in DHs as on date of audit (October-December 2021)

Sl. No.	Department	Availability in test-checked DHs				
		Required as per IPHS (100 to 200 beds)	Kinnaur (109 beds)	Solan (180 beds)	Required as per IPHS (200 to 300 beds)	Kangra (225 beds)
1	Imaging equipment	4	1	1	6	2
2	X-ray room accessories	7	0	1	7	5
3	Cardiopulmonary	13	11	7	14	11
4	Labour ward, Neonatal and Special New-born Care Unit (SNCU) Equipment	27	18	17	27	21
5	General equipment for Special New-born Care Unit	11	5	7	11	9
6	Disinfection of Special New-born Care Unit	11	6	5	11	4
7	Immunisation Equipment	13	12	10	13	8
8	ENT	16	9	5	17	11
9	Eye	24	20	15	24	15
10	Dental	42	29	28	42	27
11	Laboratory	51	26	30	51	25
12	Endoscopy	3	2	0	7	2
13	Anaesthesia	15	9	5	16	9
14	Postmortem	8	0	2	8	8
Total		245	148 (60)	133 (54)	254	157 (62)

Source: Departmental figures. Figures in brackets indicate percentage.

It can be seen from **Table 4.16** that the availability of required types of equipment in the three test-checked DHs ranged between 54 and 62 per cent.

- X-ray room accessories and post-mortem equipment were not available in DH Kinnaur.
- Equipment for endoscopy were not available in DH Solan. Only one equipment (out of seven) in x-ray accessories, five equipment (out of 11) in Disinfection of Special New-born Care Unit and two equipment (out of eight) in postmortem category were available in DH Solan.

4.9.1.2 Civil Hospitals

Audit examined availability of equipment required under 12 different categories as per IPHS norms 2012 in the selected Civil Hospitals. Required types of equipment available in the test-checked six CHs is shown in **Table 4.17**.

Table 4.17: Availability of required types of equipment in CHs as on date of audit (October-December 2021)

Sl. No.	Department	Availability in test-checked CHs							
		Essential (as per IPHS for 31 to 50 beds)	Chango (6 beds)*	Kandaghat (15 beds)*	Thural (35 beds)	Shahpur (30 beds)	Jawalamukhi (40 beds)	Essential (as per IPHS for 51 to 100 beds)	Bajnath (60 beds)
1.	Imaging Equipment	3	0	1	1	2	1	5	2
2.	X-ray room accessories	6	1	1	3	5	4	6	5
3.	Cardiopulmonary	8	0	4	5	7	4	11	5
4.	Labour ward and Neo Natal	17	0	9	6	15	11	20	14
5.	Immunisation	13	0	6	6	13	7	13	10
6.	ENT	17	0	1	0	1	0	17	1
7.	Eye	22	0	1	8	8	4	9	1
8.	Dental	4	0	4	4	3	4	4	4
9.	Laboratory	27	0	12	11	21	8	32	18
10.	Surgical	27	0	1	0	1	4	29	16
11.	Anaesthesia	15	0	0	4	0	0	14	6
12.	Postmortem Equipment	10	0	0	0	0	0	10	6
Total		169	1 (1)	40 (24)	48 (28)	76 (45)	47 (28)	170	88 (52)

Source: Departmental figures. Figures in brackets indicate percentage.

*IPHS norms for Civil Hospitals are prescribed for civil hospitals having 31-50 and 51-100 beds. CH Chango and Kandaghat, having lesser number of beds, have been compared with the norms applicable for 31-50 beds as they are designated as civil hospitals.

Thus, the availability of required types of equipment in the test-checked six CHs ranged between one to 52 per cent.

As seen from **Table 4.17**, other than x-ray accessories, none of the other 11 types of equipment was available in CH Chango. Further, ENT equipment was not available in CHs Thural and Jawalamukhi. Surgical equipment were not available in CH Thural. Equipment under anaesthesia category were not available in any CHs except CH Thural and CH Bajjnath. Post-mortem equipment was available only in one out of six test-checked CHs.

Shortfall of equipment in major departments, as indicated above, poses huge constraints in delivery of medical services to the intended beneficiaries.

4.9.2 Non-procurement of equipment despite availability of funds

- In KNSH (IGMC) Shimla, it was noticed that the Medical Superintendent (MS) had submitted (February 2018) a proposal for procurement of 88 categories of machinery and equipment worth ₹ 7.10 crore for the new Mother and Child Health (MCH) wing, out of which ₹ 3.25 crore was sanctioned in November 2018. Twenty-six categories of machinery and equipment such as laparoscopy, double dome OT light, multi parameter monitor, USG machine etc. of ₹ 2.52 crore were procured and the balance amount of ₹ 0.73 crore was lying unspent (June 2022) with the department due to non-finalisation of the tender. For the remaining machinery and equipment, required fund of ₹ 3.85 crore was neither demanded by the MS nor was provided by the Mission Director, NHM, HP.

In reply, MS, KNSH stated that the amount could not be spent due to Covid-19 and non-finalisation of tender. The reply was not acceptable as the funds were received during pre-Covid-19 period. Non-procurement of all the machinery and equipment would cause severe constraints in the operation of Mother and Child Health wing.

- In IGMC Shimla, it was noticed that ₹ 0.51 crore (₹ 0.25 crore for echo machine and ₹ 0.26 crore for equipment in paediatric department) was received during March 2020 from NHM. The funds were returned to NHM during March 2021. Thus, the department failed to utilise the fund during the year 2020-21.

In reply, Sr. MS IGMC stated (July 2022) that the equipment could not be procured due to non-finalisation of tender owing to Covid though the tender was floated thrice.

4.9.3 Non-recovery of penalty for delay in the supply of equipment by firms

As per the terms and conditions of the supply orders placed by the Medical Colleges, the maximum delivery period from the date of placing the supply order was 90 days and in case of CT scan machine, the maximum delivery period was 180 days. For delayed supply, there shall be a reduction in price @ one *per cent* of the value of delayed goods per week of delay or part thereof subject to a maximum of 10 *per cent* of the total order value.

In RPGMC, Kangra it was noticed that that there were delays ranging from 110 to 439 days in supply of 24 orders (placed between June 2015 and July 2021) of medical equipment and penalty amounting to ₹ 27.43 lakh was required to be recovered. It was noticed that penalty for delay in supply of equipment¹⁵ amounting to ₹ 0.62 lakh was recovered in three cases and in the remaining 21 cases, no recovery on account of delay in supply of equipment was made from 12 firms at the time of making the payment.

In reply, it was stated by the Principal, RPGMC, Kangra (July 2022) that due to Covid, penalty was not levied and in future, for late supply of equipment, suppliers would be penalised. The reply was not acceptable as 10 supply orders were issued during the year 2016 (Pre-Covid time).

Similarly, in IGMC Shimla, it was noticed that for 39 supply orders (placed between March 2016 and November 2021) for machinery & equipment, supply was made by the firms with delays ranging from 1 to 35 weeks after the scheduled date of delivery. The payment for equipment and machinery raised by the firms were made to the firms, but penalty amounting to ₹ 49.76 lakh as per terms and conditions was not imposed, thus giving unfair advantage to the firms.

In reply, Principal, IGMC (January 2023) stated that machinery and equipment require different stages of procurement and the process is time consuming. He further stated that during the Covid pandemic, extension for delivery of materials was granted to the suppliers. The reply is not acceptable as 27 of these supply orders pertained to the period up to November 2019 (Pre-Covid time).

¹⁵ 1. Rigid Nasal Endoscopes and Fess instrument 2. Indirect Ophthalmoscope 3. LED light source.

4.9.4 Non-utilisation/ non-functional equipment in selected health institutions

Proper functioning and utilisation of medical equipment is required for providing uninterrupted health services to the patients. In the test-checked health institutions, Audit noticed that equipment were lying unutilised and were non-functional as per the details given in **Table 4.18**.

Table 4.18: Details of unutilised and non-functional equipment

(₹ in crore)

Sl. No.	Health Institution	Name of equipment	Amount	Remarks
1	IGMC Shimla	High performance liquid chromatography machine and seven other machines in Pharmacology department	0.55	These equipment were purchased during September 2011 and December 2012 but were never put to use.
2	IGMC Shimla	Gamma camera machine in Nuclear Medicine Centre under National Cancer Control Programme	1.07	The machine became non-functional in November 2017. It had outlived its useful life and needed to be replaced (or repaired, if possible) which was not done (July 2022). Consequently, patients are referred to PMIGER Chandigarh or Delhi for these tests, where patients either have to wait for 2 to 3 months to get the dates for their scans or have to seek services at private hospitals and have to pay huge charges.
3	IGMC Shimla	10 equipment ¹⁶	Value not mentioned	There was delay (109-433 days) in issuing the supply order (May 2022) for repair of the equipment. As of June 2022, these equipment were not functioning. In reply, Sr. MS stated (July 2022) that services were managed with the remaining functional equipment of the department. The reply is not acceptable as the non-functional machines are to be repaired timely to provide optimal services to the patients.
4	CH Kandaghat	Fully automated Biochemistry Analyser ERBA- EM200 received from CMO Solan	0.06	The machine was installed during March 2021 but was lying idle (January 2022) as no demo to use the machine was organised.

Source: Departmental figures.

4.9.5 Maintenance of equipment

Maintenance of medical equipment for all health institutions was outsourced to a firm¹⁷ during October 2017. Prior to this, the equipment were maintained by the respective health institutions at their own level. It was observed that the firm had not repaired the medical equipment within seven days as prescribed in the agreement and there were delays ranging between eight and 292 days in repairing the equipment as discussed in **Para 7.3.4.10**.

¹⁶ Major equipment in the Departments: Main OT, ICU, Pulmonary, Cardiology, Paediatrics.

¹⁷ M/s Next Gen Medical Device.

4.9.6 Insufficient space to store old and unserviceable equipment

Insufficient space for storage of old medical equipment was seen in IGMC, Shimla as autoclave machine, c-arm machine (**Picture 4.9**), non-working ventilators (**Picture 4.10**) etc. were lying in the corridors, ultrasound room etc., as noticed during the joint inspection. The above machines were to be kept in the proper store or auctioned if not repairable. Thus, the hospital lacked proper space to store both serviceable and unserviceable machines.



Picture 4.9: C-arm machine placed in corridor in IGMC, Shimla



Picture 4.10: Drugs and one non-working ventilator placed in ultrasound room in female medicine ward of IGMC, Shimla

4.10 Conclusion

Availability of all essential drugs was not maintained in the test-checked health institutions. Essential medicines remained out of stock for long periods in the test-checked health institutions. Absence of essential drugs leaves the patients with no alternative but to arrange for these medicines from outside thereby increasing out-of-pocket expenditure. The State Procurement Cell constituted for procurement of drugs remained non-functional. Issues such as non-supply, delayed supply, drug supply having less shelf life etc. were noticed in the procurement of drugs.

- Against State EDL, there was shortage of drugs in the selected health institutions ranging from 12 to 100 *per cent*. Further, no drugs were available in all the selected four months, in two to 17 categories in the selected secondary health institutions. Thus, required drugs as per the EDL and category-wise were not available in all selected health institutions.
- No timeline in approving the requirements of drugs and consumables sent by lower health institutions to CMO has been prescribed to the District Purchase Committee.
- Delay in supply of 4.53 crore quantity of drugs and consumables during 2018-22 for periods ranging from 48 days to 482 days was observed. Further, 4.02 crore drugs and consumables worth ₹ 18.61 crore were not supplied by the firms during 2018-22, which had resulted in stock-out of medicine in health institutions.
- 341.59 lakh quantities of drugs and consumables had expired during 2017 to 2021 in health institutions of primary and secondary level in the State as per the data of the DVDMS.
- None of the selected health institutions was having air-conditioned pharmacy. Drugs were not stored adhering to the protocols prescribed in the Assessor Guidebook in some of the selected health institutions.

- Prescription audit was conducted by the authorities of health institutions. However, 97 prescription slips of the patients checked by Audit revealed that in 47 prescription slips, non-generic medicines were prescribed in seven selected health institutions.
- Against the requirement of various types of equipment in IPHS norms, there was shortage ranging as follows: DHs: 38 per cent to 46 per cent, CHs: 48 per cent to 76 per cent except CH Chango (99 per cent).
- The Next Gen Medical device (firm) had not repaired the equipment within 7 days as prescribed in the agreement and there were delays ranging between eight to 292 days in repairing the equipment.

4.11 Recommendations

The State Government may take steps to ensure that:

- *Procurement of drugs, consumables etc. is made in a timely manner to ensure their timely availability and avoid stock out of drugs.*
- *Procurement of drugs is made based on realistic assessment of requirements of health institutions to ensure that maximum number of patients get free drugs in all health institutions.*
- *Timelines are prescribed for the Purchase Committee to approve the requirements of drugs sent by lower health institutions to CMOs and the same may be adhered to.*
- *Provision is made in DVDMS software for submission of requirement of EDL and issue of medicine to the patient by each health institution to show the actual position of availability of EDL in the system.*
- *A mechanism exists in the DVDMS portal to calculate penalty for non-supply and delay in supply of medicines.*
- *Adequately trained manpower is posted for uploading of accurate information on DVDMS.*
- *The health institutions store the drugs as per prescribed protocols in order to maintain their efficacy, before being administered to the patients.*
- *Full range of essential equipment are made available in every health institution, particularly in view of the increasing reliance on diagnostics for the treatment of patients.*
- *Maintenance of equipment to reduce the breakdown time of critical equipment for diagnosis is done timely and regularly so that services are rendered to the patients without any hindrance.*