सत्यमेव जयते

Report of the Comptroller and Auditor General of India Performance Audit on Public Health Infrastructure and Management of Health Services

SUPREME AUDIT INSTITUTION OF INDIA

लोकहितार्थ सत्यनिष्ठा

Dedicated to Truth in Public Interest

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हिमाचल प्रदेश सरकार

GOVERNMENT OF HIMACHAL PRADESH

Report No. 2 of the year 2024

Report of the
Comptroller and Auditor General of India

Performance Audit
on
Public Health Infrastructure and Management of Health Services

Government of Himachal Pradesh

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TABLE OF CONTENTS

Preface

This Report has been prepared for submission to the Governor of the State of Himachal Pradesh under Article 151 of the Constitution of India for being laid before the Legislature. The report has been prepared in accordance with the Performance Auditing Guidelines, 2014 and Regulations on Audit and Accounts, 2020 of the Comptroller and Auditor General of India.

The report of the Comptroller and Auditor General of India contains the results of Performance Audit of Public Health Infrastructure and Management of Health Services covering the period from 2016-17 to 2020-21. The data has been updated up to 2021-22 and for human resources up to March 2023, wherever feasible.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit acknowledges the cooperation received from the Health and Family Welfare Department, Himachal Pradesh at each stage of the audit process along with their field functionaries in conducting the Performance Audit.

EXECUTIVE SUMMARY

Executive Summary

As per National Family Health Survey reports, Health indicator[1] of the State of Himachal Pradesh was better than national indicators for infant mortality rate, but poorer for sex ratio at birth for children in the last five years and average out-of-pocket expenditure per delivery in a public health facility. Considering the goals laid down in the National Health Policy (NHP), 2017 and experience in COVID-19 pandemic, a Performance Audit on "Public Health Infrastructure and Management of Health Services" in the State of Himachal Pradesh was conducted to assess the adequacy of financial resources allocated, availability of healthcare infrastructure, human resources, drugs, medicines, equipment and other consumables in the health institutions as well as efficacy in the management of health services in the State.

The Performance Audit also covered the adequacy and effectiveness of the regulatory mechanism being enforced by the Government to regulate public/private health sector, schemes being implemented by Government of India through the State Government and overall linkage with the Sustainable Development Goal (SDG – 3). The audit was conducted for the period 2016-21 but wherever feasible, the data has been updated upto 2021-22 and in case of human resources, upto March 2023.

Ministry of Health and Family Welfare, Government of India, has issued a set of uniform standards called the Indian Public Health Standards (IPHS) to improve the quality of healthcare delivery in the country and serve as a benchmark for assessing performance of the healthcare delivery system. The IPHS norms for District Hospitals (DHs), Sub-Divisional Hospitals (SDHs), Community Health Centres (CHCs), Primary Health Centres (PHCs) and Health Sub Centres (HSCs) prescribe standards for services, manpower, equipment, drugs, building and other facilities. These include standards to bring the health institutions to a minimum acceptable functional grade (indicated as essential) with scope for further improvement (indicated as desired). In addition to IPHS, various standards and guidelines on healthcare services issued by Government of India such as the Assessor's Guidebook for Quality Assurance; Bio-Medical Waste Management Rules; and Drugs and Cosmetics Rules. Though the State has not adopted IPHS norms yet, both IPHS and additional standards issued by Government of India and the norms set by the State were used to evaluate the healthcare facilities in district hospitals. As far as Ayushman Bharat (AB) is concerned, we have included findings related to Health & Wellness Centres in the report.

Complete list of medical staff available in all health institutions under Government of Himachal Pradesh were available in the respective health institutions. On an analysis of data of human resources, in terms of percentage of vacant posts, there was an overall shortfall of 41.87 *per cent* in human resources across all categories in the State

[1] Data available in respect of Himachal Pradesh for NFHS 2019-2020.

while shortfall in human resources deployed at health institutions was 41.47 *per cent* as of March 2023. When post wise vacancies were analysed, there was a skewed distribution of manpower in the health institutions, level-wise. Shortfall in the category of doctors when compared with State sanctioned strength ranged from nine *per cent* to 56 *per cent* in Medical College hospitals (MCHs) and in DHs, it ranged from zero to 22 *per cent*. The shortfall in availability of doctors in Civil Hospitals (CHs) was lowest (seven *per cent*) in Hamirpur district and highest (57 *per cent*) in Kinnaur district. There was no shortfall in Kullu district. The shortfall in availability of doctors in CHCs was lowest (14 *per cent*) in Una district and highest (42 *per cent*) in Chamba and Sirmaur districts while in Solan district there was 13 *per cent* excess availability. The shortfall in availability of doctors in PHCs was lowest (five *per cent*) in Solan district and highest (33 *per cent*) in Sirmaur district.

Shortage of Specialists in the case of Medical College hospitals ranged from 15 *per cent* (Indira Gandhi Medical College Hospital, Shimla) to highest at 49 *per cent* (Atal Institute of Medical Super Specialities Hospital, Chamiana). When compared with State notified strength, the availability of specialists in DHs ranged from 33 *per cent* excess (DH Shimla) to 89 *per cent* shortfall (DH Lahaul & Spiti). In CHs, two (Kinnaur and Lahaul & Spiti) out of 12 districts had 100 *per cent* shortage, nine districts had a shortage of more than 69 *per cent* and only one district (Shimla) had a shortage of seven *per cent* of Specialists. In CHCs, when compared with IPHS norms, six districts had shortage of 100 *per cent*, five districts had a shortage of 90 *per cent* or more and only one district had a shortage of 70 *per cent*. In test-checked health institutions, Audit noticed that many health services could not be provided due to non-availability of staff and equipment, and infrastructure could not be gainfully utilised.

The services in a health institution are broadly classified as (i) out-patient department (OPD), (ii) indoor patient department (IPD), (iii) emergency services, (iv) maternity, (v) support and (vi) auxiliary services.

OPD services were available in all the DHs. In DH Hamirpur, all OPD services were available and in remaining DHs, OPD services ranging between six to 12 were available except DH Lahaul and Spiti, where only two OPD services were available. In selected CHs, only one to nine out of 12 OPD services were available while in CHCs, four to five out of six OPD services were not available.

The Bed Occupancy Ratio (BOR) of all the test checked health institutions was below 80 *per cent* except one selected DH and two selected CHs. Leave Against Medical Advice (LAMA) cases remained below four *per cent* in the health institutions. The emergency services were available in all the DHs/selected CHs/CHCs except CH Chango and CHC Majheen. Emergency service was not available in any of the selected PHCs, due to which patients had to move to other health institutions. In all the DHs in the State, ICU service was available except DHs Chamba, Kangra, Solan and Lahaul & Spiti. In selected CHs, none of the hospitals had ICU service.

In Maternity services, institutional births in health facilities were 90.61 *per cent* during the period 2016-22. Further, review of maternal deaths and neonatal deaths during 2016-17 to 2020-21 was not conducted though two maternal deaths (DH Solan-one, DH Kangra-one) and 37 neonatal deaths were noticed during 2016-21. The number of pregnant mothers who were not registered within the first trimester was 13.69 *per cent* of the total registered pregnant mothers in the State, mothers who had not received three or more Antenatal Care (ANC) check-ups was 25.78 *per cent* and 20.39 *per cent* mothers were not given adequate Iron Folic Acid (IFA) tablets during 2016-22.

Non availability of X-ray service in one selected CH, three selected CHCs and 16 selected PHCs; dental X-ray in three DHs, three selected CHs, three selected CHCs; ultrasonography in three DHs, one selected CH and all selected seven CHCs resulted in denial of radiology services and patients had to move to other health institutions for availing the services.

In DHs, against the requirement of 88 tests, 11 to 47 tests were available and in five selected CHs/CHCs, against the norm of 48/33 tests, 17 to 30/15 to 27 tests were available except CH Chango, where only six tests were available. No tests were available in CHC Majheen.

Firms failed to commission the 69 Sewage Treatment Plants (STPs) in the State even after 19 to 22 months after scheduled date of completion of the project. The State Government prepared an Emergency Covid Response Package-I (ECRP-I) of ₹ 114.74 crore under COVID-19 for 2019-22 and ₹ 102.58 crore was spent by the National Health Mission (NHM) during 2020-22. A major amount was spent on diagnostics including sample transport (34 *per cent*), equipment (24 *per cent*) and HR including incentives for Community Health Volunteers (21 *per cent*). Ventilator facility was available in 56 health institutions of the State and 624 out of 773 number of ventilators were working while remaining 149 (19 *per cent*) ventilators were not functional.

Audit assessed availability of drugs against essential drugs list (EDL) issued by State and availability of equipment against that listed in IPHS norms. State Procurement Cell constituted for procurement of drugs remained non-functional. Issues such as non-availability/stock out of essential drugs, non-supply, delayed supply, supply of drugs with less shelf life etc. were noticed. In selected health institutions, stock of 19 to 32 drugs (out of 100 drugs randomly selected) were not available for periods ranging from 11 to 1,422 days. 341.59 lakh quantities of drugs and consumables had expired during 2017 to 2021 at primary and secondary level health institutions as per the data of the Drug and Vaccines Distribution Management System (DVDMS).

Availability of number of types of equipment in the three test-checked DHs ranged between 54 and 62 *per cent*. The outsourced firm had not repaired the medical equipment within seven days as prescribed in the agreement and there was delay ranging between eight to 292 days in repairing the equipment.

Estimation, planning and creation of requisite infrastructure facilities are essential for ensuring the provision of optimum level of healthcare facilities. The number of HSCs were lesser than that prescribed in the IPHS norms 2012 while other health institutions (PHCs, CHCs, CHs) were more than the prescribed numbers. Number of health institutions actually available were more than State Norms (HSCs, PHCs and CHCs). The State had increased the sanctioned strength of beds by 45.02 *per cent* from 2016-17 to 2021-22 but the actual availability of beds increased by only 20.60 *per cent* during this period. The State had provided sufficient beds in IGMC Shimla as per the National Medical Commission (NMC) norms. However, during joint physical inspection in different in-patient wards of IGMC, it was noticed that there was double and triple occupancy on a single bed. There was significant shortage of beds as against the State sanctioned beds in nine out of 12 DHs, ranging between eight *per cent* and 71 *per cent* as of March 2022. The existing CHs/CHCs/PHCs did not have the required number of beds as prescribed under IPHS norms.

There were many shortcomings in execution of building infrastructure by the sampled health institutions and the residential accommodation was not adequate. 113 works valuing ₹ 60.49 crore sanctioned upto 2021 were not started due to non-availability of land, estimates and designs and non-execution of works by contractors. Sufficient water tank capacity was not available in 11 out of 16 health institutions. In selected MCHs and DHs, there was availability of 24 hours uninterrupted stabilised power supply but the same was not available in selected CHs/CHCs.

The State Government could spend 6.35 *per cent* of its total expenditure and 1.70 *per cent* of Gross State Domestic Product (GSDP) on health services during 2021-22, which was below eight *per cent* of budget and 2.5 *per cent* of GSDP targeted under NHP 2017. The State has not made realistic assessment before preparing the funds requirement in the budget for the health sector.

The expenditure under NHM was 19.46 *per cent* of the total expenditure on health in the State during 2016-22. Under the National Health Mission, six components covered under NHM schemes/programmes were selected for audit. Management of funds released under the NHM to the State Government was not satisfactory, with amounts persistently remaining unutilised at the end of each year. Deficiencies were noticed in the implementation of Janani Suraksha Yojana (JSY) and NIKSHAY Poshan Yojna as all the beneficiaries were not provided the benefits as envisaged under the scheme. Shortfall in target was also noticed in the immunization programme. As of March 2023, 1,468 (530 PHCs, 938 HSCs) Health Wellness Centres (HWCs) were operationalised against the 2,136 (563 PHCs, 1,573 HSCs) notified HWCs. Health and Wellness Centres grappled with problems of shortage of manpower, inability to spend funds and lack of necessary infrastructure. Construction of trauma centres, Mother and Child hospitals, drug testing laboratory at Baddi and several other civil works were delayed and were yet to be completed, which deprived intended beneficiaries of the benefits.

Not all of the employed doctors in Himachal Pradesh were registering/ renewing their registration regularly with the State Medical Council (SMC). No mechanism was adopted by the SMC to track and monitor the non-registered doctors. The State Council of Clinical Establishment at the apex level had not been functioning effectively, resulting in poor implementation of Clinical Establishment Act, 2010. All private clinical establishments were running on provisional registration and the process of permanent registration was not initiated. During joint physical verification, Audit observed that many private clinical establishments were running without renewal of their provisional registration.

Shortfall was noticed in conducting inspections required under Drugs and Cosmetics Rules, 1945. There was shortfall in targets of lifting drugs and cosmetics samples, delay in lifting samples and also delay in analysis of samples. Consequently, drugs declared 'not of standard quality (NSQ)' were already issued. The manufacturers were charging higher prices of medicines than the notified prices. National Pharmaceutical Pricing Authority (NPPA) had issued show cause notices to different firms for overcharging of medicines. Price approval was not being taken by several drug manufacturers for new drugs. 12 out of 25 health institutions were operating Blood Banks without renewal of licenses and seven out of 18 selected health institutions were operating x-ray facility without licenses. 61 out of 85 CHs, 40 out of 94 CHCs and 98 out of 575 PHCs had not obtained SPCB authorisation for generation of bio-medical waste.

In Dental College Shimla, apart from the State funds, stipends were also paid from Rogi Kalyan Samiti (RKS) funds. Essential drugs were not kept in store during 2016-22 and short/non-supply of consumables was observed. In the leprosy hospitals, there was a shortage of staff. For the tuberculosis sanatorium, the sanctioned strength of personnel was not reviewed after downward revision of number of beds. There was shortage of doctors in the Himachal Hospital of Mental Health & Rehabilitation (HHMH&R) and all types of essential drugs were not available in the hospital. In the HHMH&R, there were variations in data of DVDMS and hospital registers and no objection certificate from the fire department was not obtained.

The State adopted 28 indicators covering all 13 global targets. The district indicator framework was not prepared, and the State adopted SDG-3 goals after a delay of nearly two and half years from the date of adoption of national indicators. Only one meeting of the working group of SDG-3 was held while review meetings with other departments were not held regularly. Workshops /seminars, training programmes for skill development of the staff were not organised regularly. No separate funds were allocated for implementation of SDG-3, instead NHM was considered to be the primary vehicle for achieving SDG-3 targets. There was shortfall ranging from 8.90 *per cent* to 31.38 *per cent* during 2016-19 and 9.75 *per cent* in 2020-21 in allocation of funds under NHM.

In view of the above findings, Audit recommends the following:

The Government should allocate human resources in the health institutions throughout the State in a uniform manner. In the short term, the existing staff strength should be rationalised across districts and health institutions. While rationalising, it should be ensured that the postings are done in such a way that complimentary healthcare professionals i.e., doctors, nurses, paramedics, technicians and other support staff are posted in each health institution with due care to ensure the availability of infrastructure and other crucial components as well as incentivise doctors to serve in remote and far-flung areas.

Government should ensure uniform distribution of the facilities in health institutions at all levels so as to make them available in the secondary/primary level health institutions and minimise load in tertiary level health institutions. Government should also ensure availability of all OPD services, IPD services, emergency services, maternity services, diagnostic services as prescribed under IPHS norms. Steps should be taken to improve and strengthen auxiliary and support services to improve overall healthcare experience.

Availability of essential drugs and equipment as well as timely maintenance of critical equipment should be ensured at all health institutions. DVDMS portal should be used effectively for accurate capture of requirement/issue/status of availability/penalty etc. The Government should also ensure that the health institutions store the drugs as per prescribed protocols in order to maintain their efficacy, before being administered to the patients.

The Government should ensure availability of required infrastructure (beds, accommodation, buildings, water/ power supply) as per the benchmarks set under IPHS norms. The Government may ensure proper monitoring of the works relating to health institutions in coordination with executing/funding agencies with a view to expedite the completion of works.

The Government may consider increasing budget allocation on health services in line with the guidelines of National Health Policy. The budget estimates should be prepared keeping in view bottom up/systematic approach by obtaining demand assessment from the field offices.

The Government may take steps to ensure that the allotted funds under NHM are optimally utilized so that maximum beneficiaries are benefitted. A system may be developed to ensure timely payment/coverage of all JSY beneficiaries for cash incentives. A system for creation of infrastructure in HWCs created under Ayushman Bharat, appointment of Community Health Officers (CHOs) and providing of facilities as per the guidelines may also be taken up. Further, a system for monitoring of civil works under Health Strengthening System for their timely completion may also be developed.

Government may ensure that SMC maintains the data of all registered medical practitioners in electronic form as well as develops a communication mechanism with

them/ private health institutions to check the status of registration of the doctors. Ensure the permanent registration of clinical establishments. The targeted number of inspections may be carried out to ensure the quality of drugs sold. Increase the testing capacities of the laboratories to ensure that maximum number of drug samples are lifted, and test results are obtained timely. Ensure that timely action is taken by health institutions for obtaining license from Atomic Energy Regulatory Board (AERB), State Pollution Control Board (SPCB) etc.

State Government should endeavour to conduct timely meetings of the working group of SDG-3. Organise regular workshops/ seminars and training programme and make available sufficient funds from NHM to achieve the SDG-3 targets. Also ensure preparation of the District Indicator Framework to enable monitoring of the districts towards achieving SDG-3 targets.

CHAPTER-I
INTRODUCTION

Chapter I: Introduction

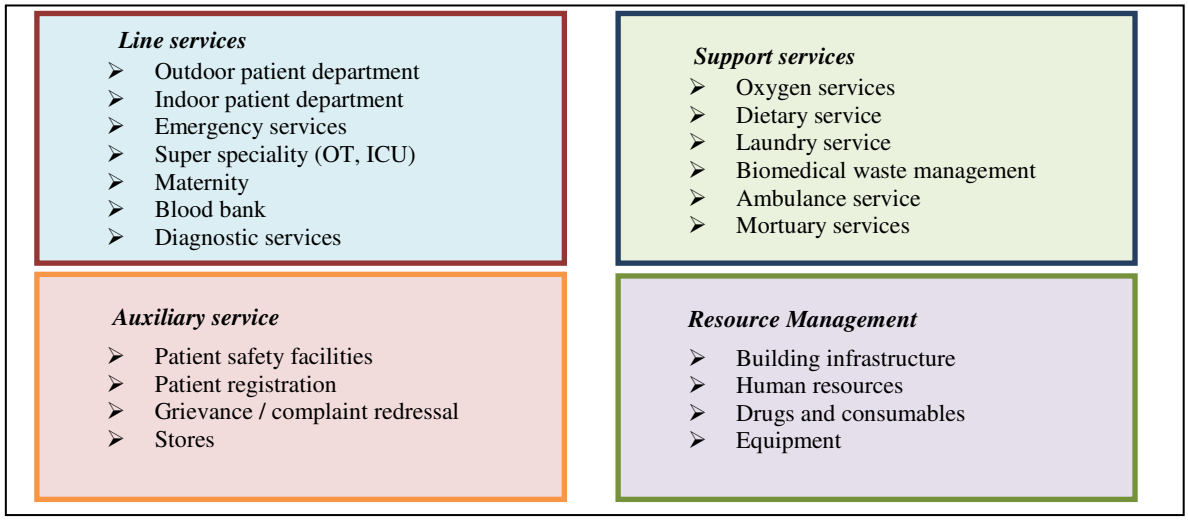
Health is one of the most important parameters for ascertaining the quality of human life. To keep people healthy and to upgrade their level of living, Central and State Governments are strengthening, modernising and expanding health infrastructure and medical services. Public health infrastructure provides communities, States and the nation with the capacity to prevent disease, promote health, and prepare for and respond to both acute (emergency) threats and chronic (ongoing) challenges to health. Infrastructure is the foundation for planning, delivering, evaluating, and improving public health. Ensuring healthy lives and promoting well-being at all ages is essential to sustainable development. The Health Goal-SDG 3 envisages to "ensure healthy lives and promote wellbeing for all at all ages". The SDG Declaration emphasises that universal health coverage and access to quality healthcare should be achieved for the overall health goal.

The National Health Mission (NHM) Framework for implementation and Indian Public Health Standards (IPHS) envisage a wide range of services to be provided by the health institutions, wherein it can provide all basic speciality services and gradually develop super-speciality services. However, the demand for services at the health institutions is not satisfactorily catered due to factors like inadequacy of human resources, critical equipment, infrastructure, etc. Consequently, the tertiary[1] care hospitals are burdened with high patient load due to less than desired number of functional specialities at primary[2] and secondary[3] healthcare institutions/hospitals.

1.1 Health services

Health services provided by hospitals can broadly be divided into the following categories viz., line services, support services, auxiliary services and resource management as shown in **Chart 1.1**.

Chart 1.1: Hospital services



[1] Hospitals where specialised care is provided usually on referral basis.
[2] Institutions which provide initial healthcare services to the people.
[3] Patients requiring more serious healthcare attention are referred to the second tier of the healthcare system for providing preventive, promotive and curative healthcare services.

All public health services depend on the presence of basic infrastructure, including availability of skilled human resources. Every public health programme such as immunisation, infectious disease monitoring, cancer and asthma prevention, drinking water quality or injury prevention requires health professionals who are competent in synergising their professional and technical skills in public health and provide organisations with the capacity to assess and respond to community health needs. Public health infrastructure has been referred to as "the nerve centre of the public health system". While creation of a strong infrastructure depends on many organisations, public health agencies (Health Departments) are considered primary players.

The primary objective of the National Health Policy, 2017 is to improve health status through concerted policy action in all sectors and expand preventive, promotive, curative, palliative and rehabilitative services provided through the public sector. The policy also recognises the pivotal importance of Sustainable Development Goals to ensure healthy lives and promote well-being for all at all ages. At the global level, the Sustainable Development Agenda aims to ensure healthy lives and promote well-being for all at all ages by 2030 as per Sustainable Development Goal (SDG) 3.

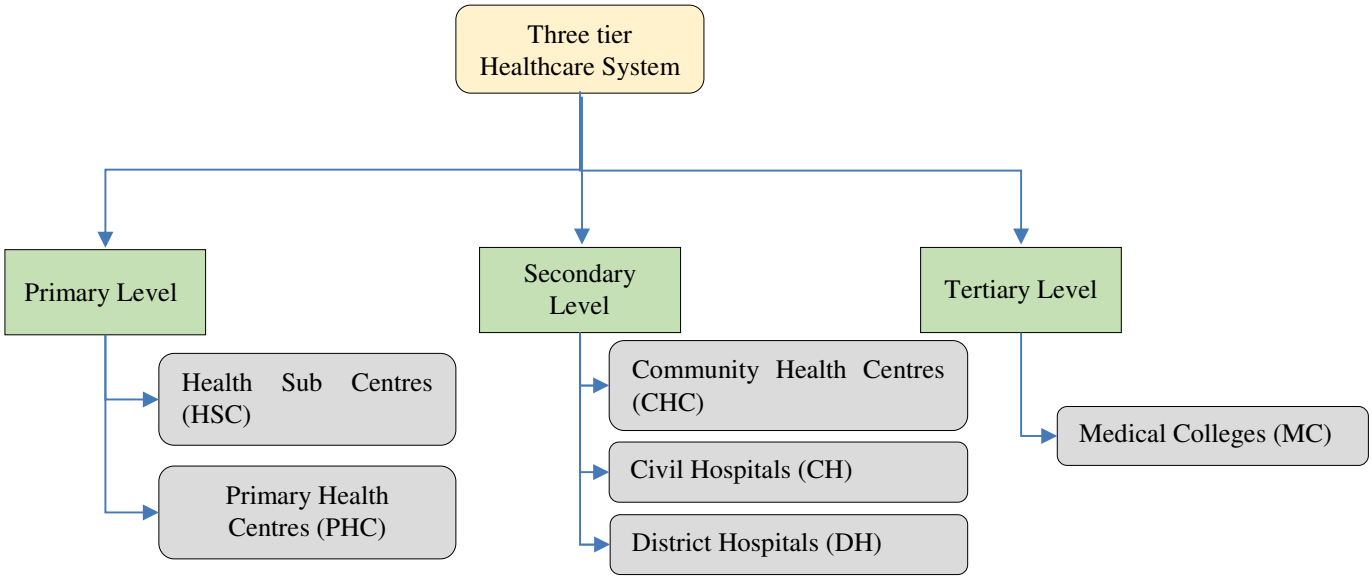
Indian Public Health Standards (IPHS) are a set of uniform standards envisaged to improve the quality of healthcare delivery in the country. The IPHS norms were introduced in 2007 and revised in 2012 keeping in view the changing protocols of the existing programmes and introduction of new programmes especially for Non-Communicable Diseases. However, the State has not adopted IPHS norms; instead it has its own norms for healthcare services.

India's public health system has developed over the years as a three-tier system, comprising primary, secondary and tertiary levels of healthcare. Health Sub-Centres (HSCs) and Primary Health Centres (PHCs) are primary level healthcare units which provide initial healthcare services to the people. Patients requiring more serious healthcare attention are referred to the second tier of the healthcare system consisting of Community Health Centres (CHCs), Sub-District/ Sub-Divisional Hospitals (SDH) and District Hospitals (DH), established in each district for providing preventive, promotive and curative healthcare services to the population. A tertiary referral hospital is a hospital that provides tertiary care, which is healthcare from specialists in a large hospital after referral from primary care and secondary care. Tertiary healthcare is provided by the hospitals associated with the Government Medical colleges.

1.2 Overview of healthcare facilities in the State

In Himachal Pradesh, public healthcare is structured into three levels for providing primary care, secondary care and tertiary care as indicated in **Chart 1.2**.

Chart 1.2: Healthcare System in Himachal Pradesh

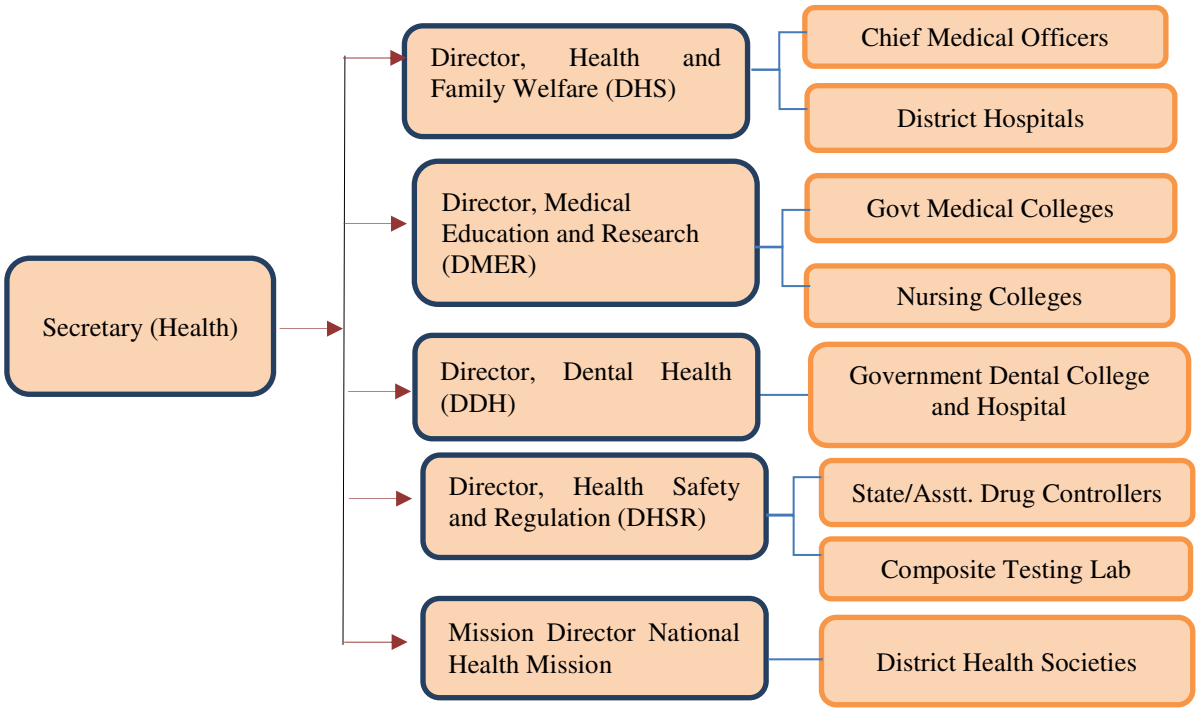


Himachal Pradesh has a population of 68.65 lakh (Census-2011). Public healthcare in the State is structured into three levels for providing primary care, secondary care and tertiary care as indicated in **Chart 1.2**, under the Department of Health and Family Welfare (Primary level: 2,114 HSCs and 580 PHCs; secondary level: 105 CHCs, 89 sub-divisional hospitals/ civil hospitals and 12 district/zonal/regional hospitals; tertiary level: six medical college hospitals and one super speciality Institute/ two nursing colleges and their associated hospitals).

1.3 Organisational set-up

The Department of Health and Family Welfare is headed by Secretary (Health), under whom there are five Directorates as shown in **Chart 1.3** below.

Chart 1.3: Organogram of Health and Family Welfare Department

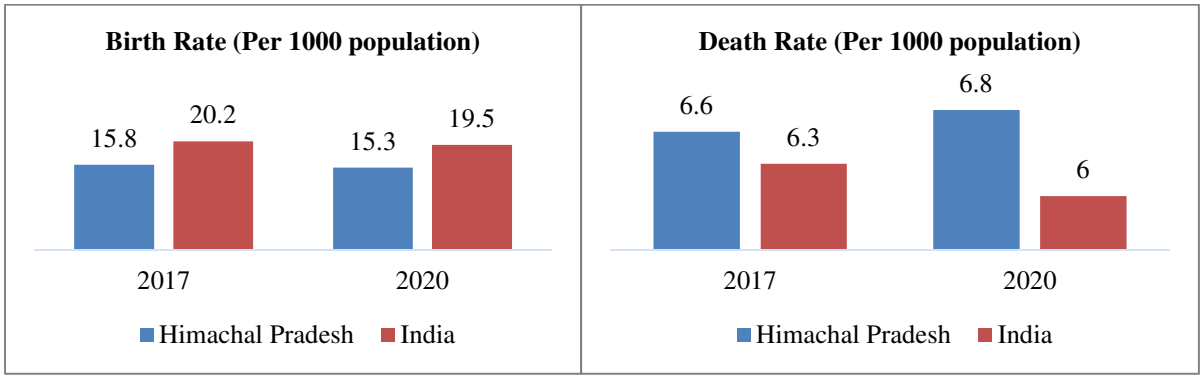


Each district has one Chief Medical Officer (CMO), one District Hospital (DH) and one District Health Society. There is only one Composite Testing Laboratory which is under the control of Director, Health Safety and Regulation.

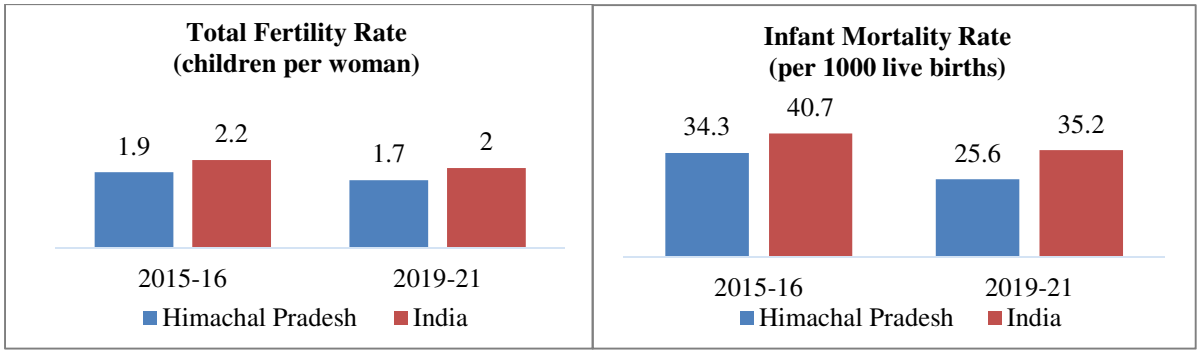
1.4 Status of Health Indicators in the State

The healthcare services in a State can be evaluated on the basis of the achievement against benchmarks of health indicators. The status of a few important health indicators of Himachal Pradesh vis-à-vis the national average are given in **Chart 1.4**.

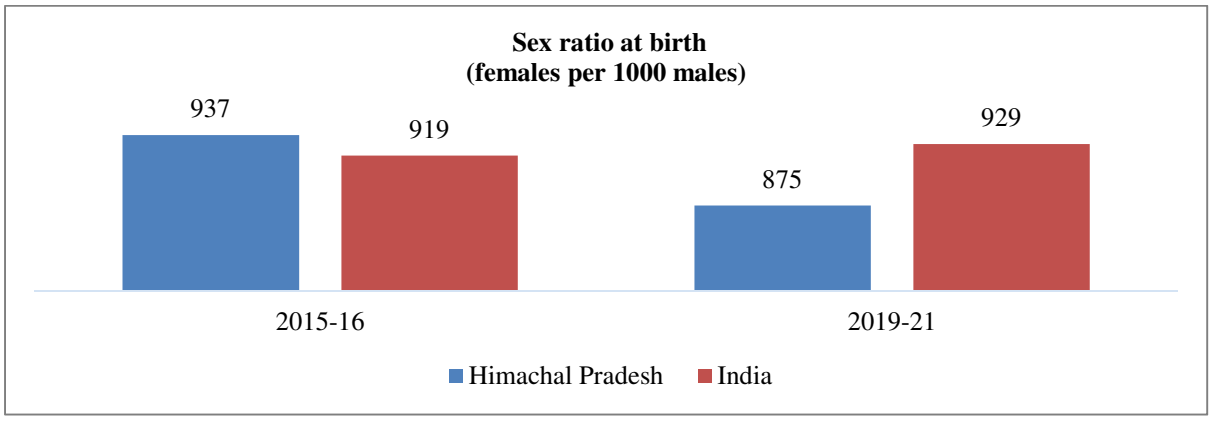
Chart 1.4: Health Indicators in the State



Source: Health and Family Welfare Statistics in India 2019-20 (for 2017 figures) and Sample Registration System bulletin May 2022 (for 2020 figures)



Source: NFHS-4 (2015-16), NFHS-5 (2019-21 for India and 2019-20 for Himachal Pradesh which was covered in Phase-I of the survey)



Source: NFHS-4 (2015-16), NFHS-5 (2019-21 for India and 2019-20 for Himachal Pradesh which was covered in Phase-I of the survey)

It was observed that the birth rate (per 1,000) in the State has decreased from 15.8 (2017) to 15.3 (2020) and remained less than the national figures. Death rate (per 1,000) in the State increased from 6.6 (2017) to 6.8 (2020) which is above the national figures. In case of total fertility rate, State figures decreased from 1.9 (2015-16) to 1.7 (2019-20) and were lower than the national figures. Infant mortality rate decreased from 34.3 to 25.6 and was less than the national figures. Sex ratio at birth decreased from 937 (2015-16) to 875 (2019-20).

Maternal mortality rate could not be calculated as number of births in the State were less than one lakh. However as per HMIS data, 71 maternal deaths took place in 2020-21.

The State fared poorly compared to the national indicators in terms of death rate and sex ratio at birth. The State indicators were lower than the national indicators in terms of birth rate and total fertility rate. However, the State fared better in terms of infant mortality rate.

1.5 Himachal Pradesh health indicators compared with National Health Indicators as per National Family Health Survey-5 (NFHS-5)

The National Family Health Survey conducted in 2015-16 (NFHS-4) and NFHS-5 conducted in 2019-21, provides information on population, health and nutrition for India and each state/union territory (UT). Some of the important health indicators of the State of Himachal Pradesh are given below:

Table 1.1: Himachal Pradesh Health Indicators as per NFHS-5

Indicator	NFHS- 4 (2015-16)	NFHS- 4 (2015-16)	NFHS- 5 (2019-20)	NFHS- 5 (2019-21)
	HP	India	HP	India
Sex ratio of the total population (females per 1,000 males)	1,078	991	1,040	1,020
Sex ratio at birth for children born in the last five years (females per 1,000 males)	937	919	875	929
Total fertility rate (children per woman)	1.9	2.2	1.7	2
Neonatal mortality rate (NNMR)	25.5	29.5	20.5	24.9
Infant mortality rate (IMR)	34.3	40.7	25.6	35.2
Under-five mortality rate (U5MR)	37.6	49.7	28.9	41.9
Mothers who had an antenatal check-up in the first trimester (percent)	70.5	58.6	72.4	70
Mothers who had at least four antenatal care visits (*per cent)*	69.1	51.2	70.3	58.1
Average out-of-pocket expenditure per delivery in a public health facility (₹)	3,329	3,197	3,760	2,916
Institutional births (*per cent*)	76.4	78.9	88.2	88.6
Births delivered by Caesarean section (*per cent*)	16.7	17.2	21	21.5

Source: State health indicators (i) Green: improved & (ii) Red: worsened/decreased

Health indicators (2019-20) of the State are better than national indicators except for sex ratio of children born in the last five years and average out-of-pocket expenditure per delivery in a public health facility. Sex ratio of total population declined from 1,078 to 1,040 but it remained above the national average of 1,020. Sex ratio at birth for children born in the last five years at 875 also remained below the national average of 929.

There has been improvement in neonatal mortality rate (NNMR), infant mortality rate (IMR), under-five mortality rate (U5MR), antenatal check-ups and institutional births in Himachal Pradesh.

There has been increase in births delivered by Caesarean section and average out-of-pocket expenditure per delivery in a public health facility in the State.

1.6 Audit Objectives

The new National Health Policy (NHP) adopted in 2017 builds on the progress made in 14 years since the last NHP 2002. The context had changed in four major ways. First, although maternal and child mortality have rapidly declined, there is growing burden on account of non-communicable diseases and some infectious diseases. The second important change is the emergence of a robust healthcare industry estimated to be growing at double digit. The third change is the growing incidences of catastrophic expenditure due to healthcare costs, which are presently estimated to be one of the major contributors to poverty. Fourth, a rising economic growth enables enhanced fiscal capacity. Therefore, the new health policy was adopted to respond to these contextual changes. The primary aim of the NHP 2017 is to inform, clarify, strengthen and prioritise the role of the Government in shaping health systems in all its dimensions.

Considering the goals laid down in the NHP 2017 and experience during COVID-19 pandemic, it has become crucial to assess the adequacy of financial resources, availability of health infrastructure, manpower, machinery and equipment in the health institutions as well as efficacy in the management of health services in the State through existing policy interventions and scope for further improvement. Thus, to ensure timely and systematic corrections, a performance audit on "Public Health Infrastructure and Management of Health Services" in the State of Himachal Pradesh was taken up. The objective of the Performance Audit (PA) was to provide a holistic view of the healthcare sector in the State i.e., a macro picture using State-level information and data and a micro picture arising from detailed audit analysis/findings on maintenance of infrastructure and delivery of healthcare services.

The objectives of the Performance Audit (PA) were to:

- assess the availability of necessary human resources at all levels e.g. doctors, nurses, paramedics etc.;
- assess the availability of drugs, medicines, equipment and other consumables;
- assess the availability and management of healthcare infrastructure;
- assess the adequacy of funding for healthcare;
- examine the funding and spending of various schemes of the Government of India;
- examine the adequacy and effectiveness of the regulatory mechanisms for ensuring that quality healthcare services are provided in the public/private healthcare institutions/ practitioners; and
- assess whether State spending on health has improved the health and well-being of the people as per SDG 3.

1.7 Scope of Audit and Methodology adopted

The audit was conducted for the period 2016-21. Wherever feasible, the data has been updated up to the year 2021-22 and in case of human resources upto March 2023. Districts were considered as the first unit of sampling and blocks were taken as the second level of selection. Selection of the field units were made since simple random sampling without replacement method using IDEA software.

The following components covered under NHM schemes/programmes were also selected based on expenditure:

(i) Reproductive, Maternal, Child Health

Objective: Improving maternal and child health and their survival along with focus on reducing maternal, new-born and child mortality.

(ii) Routine Immunisation

Objective: Immunisation of children against 12 preventable diseases[4] under universal immunisation programme (UIP).

(iii) National TB Control Programme

Objective: Control and elimination of Tuberculosis in India by 2025.

(iv) Health System Strengthening

Objective: Adoption of the Indian Public Health Standards, strengthen the public health system including upgradation of existing or construction of new infrastructure and strengthening the delivery of Primary Healthcare, through establishment of "Health and Wellness Centres".

(v) Infrastructure maintenance

Objective: Reimbursement of salary of regular staff under some of the schemes by GoI.

(vi) Covid-19

Objective: Due to the pandemic, to assess the adequacy of financial resources, availability of health infrastructure, manpower, machinery and equipment in the health institutions as well as efficacy in the management of health services in the State.

The audit sample is described below.

[4] Diphtheria, Pertussis, Tetanus, Polio, Measles, Rubella, severe form of Childhood Tuberculosis, Hepatitis B, Meningitis & Pneumonia caused by Haemophilus Influenzae type B, Rotavirus diarrhoea, Pneumococcal Pneumonia and Japanese Encephalitis.

All five Directorates

- Director, Health and Family Welfare
- Director, Medical Education and Research
- Director, Health Safety and Regulation
- Director, Dental Health
- Mission Director, National Health Mission

Three districts (Kinnaur, Solan and Kangra) for field study out of 12 districts selected using Simple Random Sampling method

- All three District Hospitals/Chief Medical Officers (CMO) of selected districts.
- Eight out of 20 Block Medical Officers (BMOs)
- Six out of 10 Civil Hospitals (CHs)
- Seven out of 10 Community Health Centres (CHCs) were selected as in one BMO there was no CHC.
- 17 out of 50 Primary Health Centres* (PHCs). To compensate the deficit of one CHC, one additional PHC was selected
- 32 out of 221 Health Sub-Centres** (HSCs)
- Two out of Six Medical Colleges i.e. IGMC Shimla and RPGMC Kangra
- Two Nursing colleges-Shimla and Mandi
- Two out of four training centres for health staff in Shimla and Kangra
- State Drug Controller, Baddi, Solan district and two out of four Assistant Drug Controllers, Baddi and Dharamshala
- Composite Testing Laboratory, Kandaghat
- Five out of six specialised hospitals including one Dental college

* *There were 580 Primary Health Centres (PHCs) in Himachal Pradesh, out of which 431 PHCs were designated as HWCs.*

** *There were 2,114 Health Sub-Centres (HSCs) in Himachal Pradesh, out of which 1,321 HSCs were designated as HWCs.*

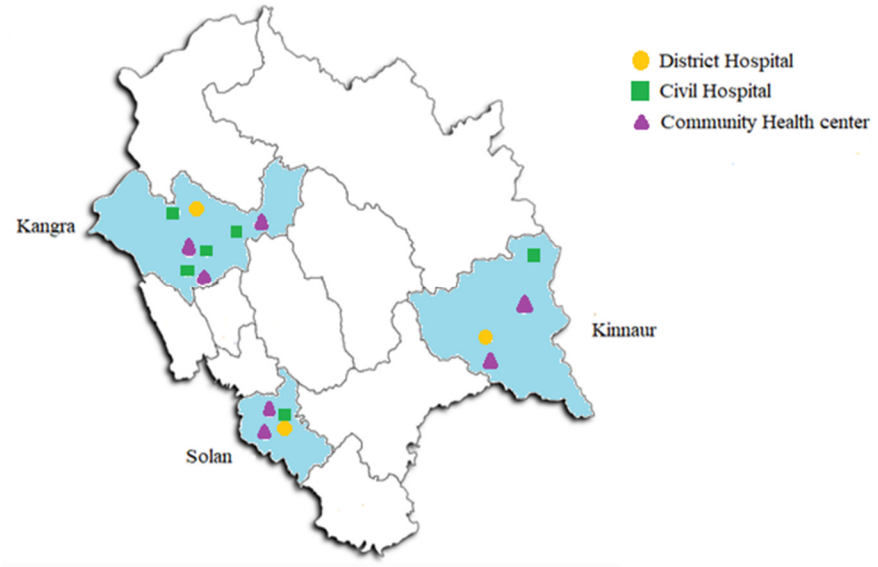
Sustainable Development Goals (SDGs) were analysed and mapped with Himachal Pradesh Vision 2030 Document. Moreover, the records pertaining to assistance/grants/equipment received for COVID-19 were scrutinised. Funding by Local Bodies and private sector on healthcare was excluded. However, the regulatory aspects/information available with the Health Department were reviewed during the Performance Audit.

Apart from scrutiny of records in the aforementioned offices, joint physical verification with the departmental officers to verify the existing healthcare infrastructure and services in public/private health institutions, progress of construction works and joint physical verification of drug testing through the Drug Controller was also carried out. Interview/survey of the beneficiaries/stakeholders was carried out to assess the effectiveness of delivery of medical and other services and existence of required infrastructure. Documentary and photographic evidences were also collected to support the audit observations.

An entry conference with Secretary (Health) was held on 7th December 2021, wherein the audit objectives, audit criteria, scope of audit, etc. were discussed.

Audit findings were discussed with the Secretary (Health) in an Exit Conference held on 19th January 2023 and views of the Government have been incorporated at appropriate places in the report.

Districts for selection of field units in Himachal Pradesh are depicted on the map below:



1.8 Audit Criteria

Criteria adopted for the performance audit include:

i. National Health Policy 2017 and NHM Assessor Guidebook 2013

ii. Indian Public Health Standards, 2012

iii. Sustainable Development Goals (SDG) -3

iv. The Indian Medical Council Act, 1956 replaced by National Medical Commission in 2019

v. Clinical Establishment Act, 2010 (as adopted by Himachal Pradesh in December 2012)

vi. Drugs & Cosmetics Act, 1940

vii. Drugs and Cosmetics Rules, 1945

viii. The Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) (PNDT) Act, 1994

ix. Bio-Medical Waste Management Rules, 2016

x. Atomic Energy Act, 1962 & Atomic Energy (Radiation Protection) Rules, 2004

xi. GOI/State scheme guidelines

xii. Himachal Pradesh Financial Rules, 1971 and 2009 and notifications/ orders issued by the State Government.

1.9 Consideration of Ayushman Bharat in this report

Ayushman Bharat (AB), the flagship health scheme of the Government of India, was launched in September 2018 to achieve Universal Health Coverage as recommended in the National Health Policy, 2017. AB adopts a continuum of care approach, comprising two inter-related components, which are:

Health and Wellness Centres (HWCs)

- Creation of 1,50,000 HWCs by transforming the existing Sub Centres and Primary Health Centres in February 2018.
- Aim to deliver Comprehensive Primary Health-Care (CPHC) covering maternal and child health services and non-communicable diseases, including free essential drugs and diagnostic services.

PM-Jan Arogya Yojana (PM-JAY)

- Aims to provide a cover of ₹ five lakh per family per year for secondary and tertiary care hospitalisation across public and private empanelled hospitals in India.
- Over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits.
- Provides cashless access to healthcare services for the beneficiary at the point of service, that is, the hospital.
- Benefits of the scheme are portable across the country i.e., a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
- Services include approximately 1,350 procedures covering all the costs related to treatment, including but not limited to drugs, supplies, diagnostic services, physician's fees, room charges, surgeon charges, OT and ICU charges etc.
- Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

In Himachal Pradesh 4,78,985 families were eligible for enrolment under PM-JAY as per Rashtriya Swasthya Bima Yojana which were targeted to be enrolled under PM-JAY. Around 11,13,526 beneficiaries of 4,32,182 families have been verified and provided with Ayushman cards under the scheme as of 31st March 2022, leaving 46,803 eligible families yet to be covered under PM-JAY.

PM-JAY cards are being issued against each household identity document (ID). The district-wise households with size are mentioned in **Table 1.2**.

Table 1.2: Coverage of Households and Beneficiaries across districts under PMJAY

Name of District	Number of households with size			Total
	1 to 10 members	11 to 20 members	21 and above members	
Bilaspur	26,808	39	0	26,847
Chamba	35,983	11	0	35,994
Hamirpur	31,991	10	0	32,001
Kangra	90,418	15	0	90,433
Kinnaur	6,067	0	0	6,067
Kullu	27,858	21	0	27,879

Name of District	Number of households with size			Total
	1 to 10 members	11 to 20 members	21 and above members	
Lahaul-Spiti	2,154	0	0	2,154
Mandi	85,214	28	0	85,242
Shimla	40,394	24	0	40,418
Sirmaur	31,921	94	0	32,015
Solan	25,800	29	0	25,829
Una	24,775	15	0	24,790
Others#	2,513	0	0	2,513
Total	**4,31,896**	**286**	**0**	**4,32,182**

Source: State data warehouse

 # Families for which district is not mentioned in identity

An all-India Performance Audit of PMJAY was conducted for the period up to March 2021, in which Himachal Pradesh was one of the sampled States. The results of the said audit have been included in Report No. 11 of 2023 (Performance Audit of Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana). In the current report, findings related to Health & Wellness Centres have been included in a separate chapter and implementation of Ayushman Bharat has also been considered while making recommendations in various areas of the health sector.

1.10 Audit Findings

The audit findings are given in the succeeding chapters:

Chapter No.	Subject
II	Human Resources
III	Healthcare Services
IV	Drugs, Equipment and other Consumables
V	Healthcare Infrastructure
VI	Financial Management
VII	Centrally Sponsored Schemes
VIII	Regulatory Mechanism
IX	Specialised Hospitals
X	Sustainable Development Goals (SDGs)-3

CHAPTER-II
HUMAN RESOURCES

Chapter II: Human Resources

For the effective and efficient functioning of a health institution, adequate number of motivated, empowered, trained and skilled human resources are essential. The number and type of staff in terms of Medical Officers (MOs), specialists, nurses, allied health professionals, administrative and support staff etc. have to be ascertained taking into consideration health facility requirements of the people to which the health institution caters to. Engagement of adequate and appropriate human resources with reference to patient load and number of beds is of utmost importance in order to obtain desired results from a health facility. National Health Mission aims towards ensuring uninterrupted and quality healthcare by increasing the availability of doctors, specialists, nurses, paramedical staff, etc. Availability of manpower and related issues in the State of Himachal Pradesh have been discussed in the succeeding paragraphs.

2.1 Availability of doctors, nurses, paramedical and other staff in the State

The State Government had not adopted IPHS norms 2012 for allocation of human resources to the various categories of health institutions existing in the State (Medical College & Hospitals (MCHs), DHs, CHs, CHCs, PHCs and HSCs). Instead, staff had been sanctioned as per the State norms (2016). The details of available manpower in the State are shown in the following **Table 2.1** and **Chart 2.1**.

Table 2.1: Human resource status in different categories in the State

Directorate	Major Category	Human resource status in different categories in the State as on 31/03/2017				Human resource status in different categories in the State as on 31/03/2023			
		Sanctioned	In-position	Shortage	Shortage (*per cent*)	Sanctioned	In-position	Shortage	Shortage (*per cent*)
Director, Health Services (DHS)	Block Medical Officer	73	50	23	31.51	77	108	(+) 31	0
	Medical Officer	2,081	1,647	434	20.86	2,802	2,678	124	4.43
	Staff Nurse	3,141	2,541	600	19.10	3,848	3,201	647	16.81
	Male Health Worker (MHW)	2,036	894	1,142	56.09	2,072	226	1,846	89.09
	Female Health Worker (FHW)	2,242	1,831	411	18.33	2,301	1,210	1,091	47.41
	Chief Pharmacist/ Pharmacist	1,243	863	380	30.57	1,372	1,196	176	12.83
	Lab Technician	921	304	617	66.99	1,001	546	455	45.45
	Others*	8,542	4,110	4,432	51.88	11,420	5,002	6,418	56.20
	Sub-total DHS	**20,279**	**12,240**	**8,039**	**39.64**	**24,893**	**14,167**	**10,757**	**43.21**
Director, Medical	Headquarters	20	16	4	20.00	48	21	27	56.25
	Professor$	164	111	53	32.32	218	156	62	28.44
	Associate Professor	179	102	77	43.02	234	130	104	44.44
	Assistant Professor	298	220	78	26.17	426	418	8	1.88

Directorate	Major Category	Human resource status in different categories in the State as on 31/03/2017				Human resource status in different categories in the State as on 31/03/2023			
		Sanctioned	In-position	Shortage	Shortage (*per cent*)	Sanctioned	In-position	Shortage	Shortage (*per cent*)
Education and Research (Headquarters, six medical colleges[1] and one dental college)	Sr. Resident	488	310	178	36.48	609	381	228	37.44
	Others#	111	22	89	80.18	326	71	255	78.22
	H.P. Government Dental College	56	44	12	21.43	55	51	4	7.27
	Sub-total DMER	**1,316**	**825**	**491**	**37.31**	**1,916**	**1,228**	**688**	**35.91**
Director, Health Safety and Regulation (DHSR)	Headquarters	22	17	5	22.73	21	16	5	23.81
	Technical staff at Composite Testing Laboratory (CTL) Kandaghat	31	11	20	64.52	31	22	9	29.03
	Ministerial and supporting staff at CTL	22	19	3	13.64	20	14	6	30.00
	State Drug Controller (SDC) staff	4	4	0	0	11	12	(+)1	0
	Drug Inspectors	22	17	5	22.73	44	40	4	9.09
	Others*	45	18	27	60.00	47	35	12	25.53
	Sub-total DHSR	**146**	**86**	**60**	**41.10**	**174**	**121****	**54**	**31.03**
Director, Dental Services	Medical Officer Dental	345	330	15	4.35	345	332	13	3.77
	Dental Mechanics/ Hygienists/ Attendants	297	188	109	36.70	308	246	62	20.13
	Others*	19	17	2	10.53	18	13	5	27.78
	Sub-total Dental	**661**	**535**	**126**	**19.06**	**671**	**591**	**80**	**11.92**
Grand total		**22,402**	**13,686**	**8,716**	**38.91**	**27,654**	**16,125**	**11,579^**	**41.87**

Source: Information provided by the directorate.

**Others includes remaining categories/posts in any cadre which have not been shown explicitly.*

*** excluding 18 outsourced staff, $ Including Principals, # Includes Tutor and Junior Resident.*

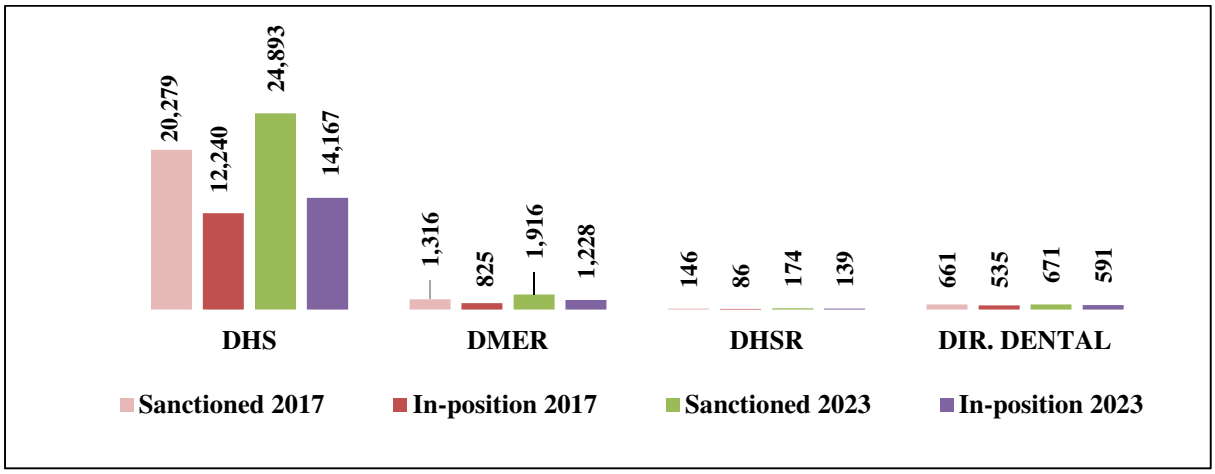
^ The excesses (BMOs and SDCs in March 2023) have not been considered while arriving at the vacancies.

In addition to the above, there were 5,919 number[2] of outsourced employees in the State as on 31st March 2023. Out of these, NHM had 2,929 outsourced staff which comprised 969 CHOs, 331 nurses, 261 DEOs and 1,368 other staff. The remaining 2,990 outsourced staff were deployed in the three Directorates – DHS, DMER and DHSR. These staff comprised of eight pharmacists, 99 nurses, 252 lab technicians/ paramedics and 2,631 other staff.

[1] IGMC Shimla, RPGMC Kangra, RKGMC Hamirpur, SLBSMC Mandi, YSPGMC Nahan, and PJLNMC Chamba. Data as on 31/03/2017 does not include RKGMC Hamirpur as it was established in 2018.

[2] Director, Health Safety and Regulation: 221; NHM: 2,929; Director, Health Services: 495 under RKS and 23 outsourced and Director, Medical Education and Research: 2,251.

Chart 2.1: Status of availability of manpower (Directorate-wise) against the sanctioned strength



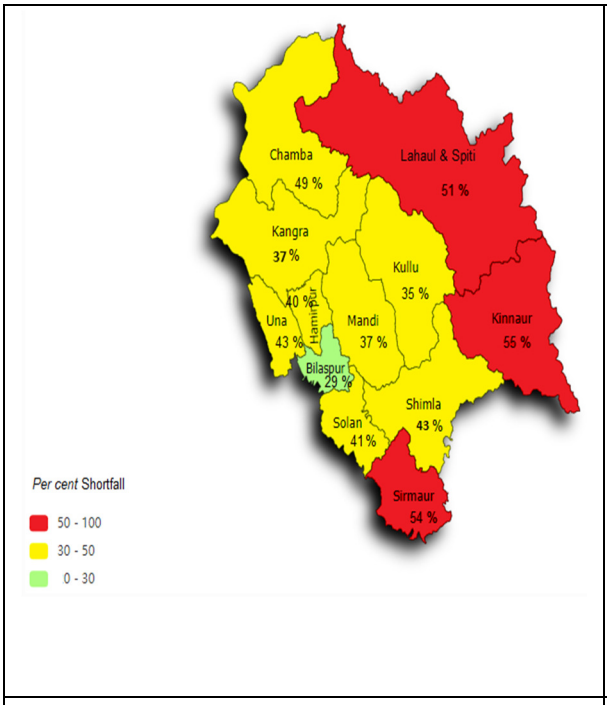
As evident from **Table 2.1**, there was an overall shortage of 38.91 *per cent* during March 2017 which increased to 41.87 *per cent* during March 2023 as compared with the State sanctioned strength in four directorates, which had adverse impact on the provision of medical services to the public, as indicated in the following paragraphs.

- In DHS, there was an overall shortage of 39.64 *per cent* during March 2017 which increased to 43.21 *per cent* during March 2023, out of which major shortage was noticed in cadre of male health worker (March 2017: 56.09 *per cent*; March 2023: 89.09 *per cent*), female health worker (March 2017: 18.33 *per cent*; March 2023: 47.41 *per cent*), pharmacist (March 2017: 30.57 *per cent*; March 2023: 12.83 *per cent*) and lab technician (March 2017: 66.99 *per cent*; March 2023: 45.45 *per cent*). The shortage of MHW/FHW had adversely affected the services in HSCs as Audit observed that 46.10 *per cent* of HSCs in the selected districts were running without any staff as of March 2023, as discussed in subsequent **Para 2.2.7**. Thus, basic health services like maternal health (ANC registration, pregnancy counselling etc.), family planning, programs under NHM, etc. were affected.
- In DMER, there was an overall shortage of 37.31 *per cent* during March 2017 which reduced to 35.91 *per cent* in March 2023, out of which major shortage was noticed in the cadre of Professor/Associate Professor (March 2017: 37.90 *per cent*; March 2023: 36.73 *per cent*), which affected the specialists' services at tertiary level, as commented in succeeding **Para 2.2.1**.
- In Director, Health Safety and Regulation, there was an overall shortage of 41.10 *per cent* during March 2017 which reduced to 31.03 *per cent* in March 2023, out of which major shortage was noticed in the cadre of technical staff of CTL (March 2017: 64.52 *per cent*; March 2023: 29.03 *per cent*), due to which there were delays in analysing drug samples as mentioned in **Para 8.4.5** of **Chapter 8**.
- In Director, Dental services, there was an overall shortage of 19.06 *per cent* during March 2017 which decreased to 11.92 *per cent* in March 2023. Major shortage was noticed in dental mechanics/ hygienists/ attendants (March 2017: 36.70 *per cent*; March 2023: 20.13 *per cent*).

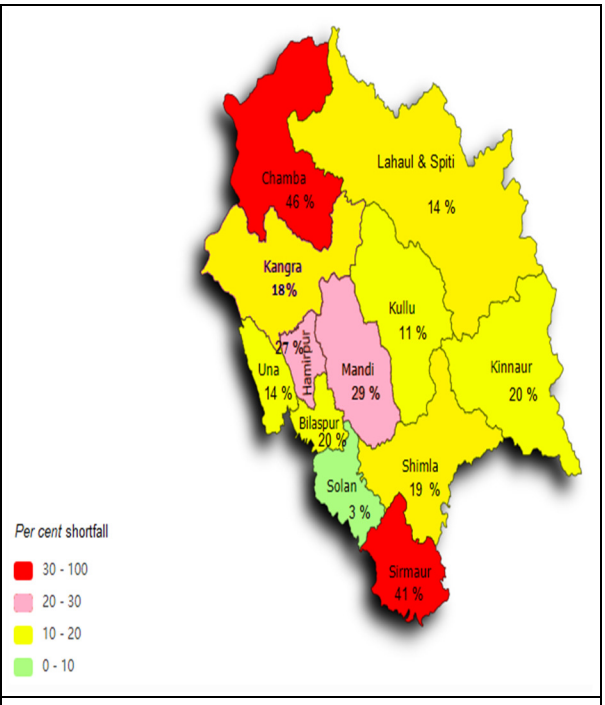
During the Exit Conference, Secretary (Health) to the Government of Himachal Pradesh accepted the overall shortage of human resources and specialists in health institutions and assured to look into the matter.

2.1.1 District-wise shortfall of overall staff, doctors (including specialists), nursing staff, paramedical staff, health workers and other staff

Audit scrutiny revealed that there was shortfall of overall staff, doctors (including specialist), nursing staff, public health staff[3], paramedical staff and other staff[4] deployed at health institutions. There was an overall shortfall of 41.47 *per cent* in human resources across all categories in the State as a whole as of March 2023. The details of district-wise shortfall in human resource deployed as of March 2023 when compared with the State sanctioned strength are shown in **Maps 2.1** to **2.6**:

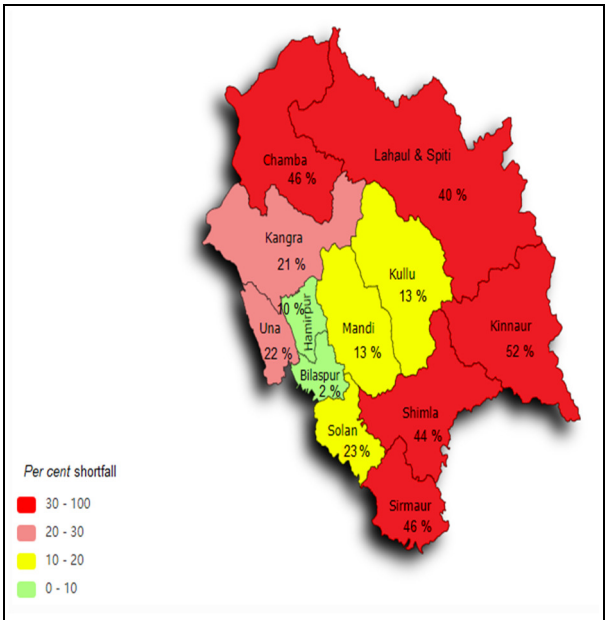


Map 2.1: District-wise overall manpower shortage

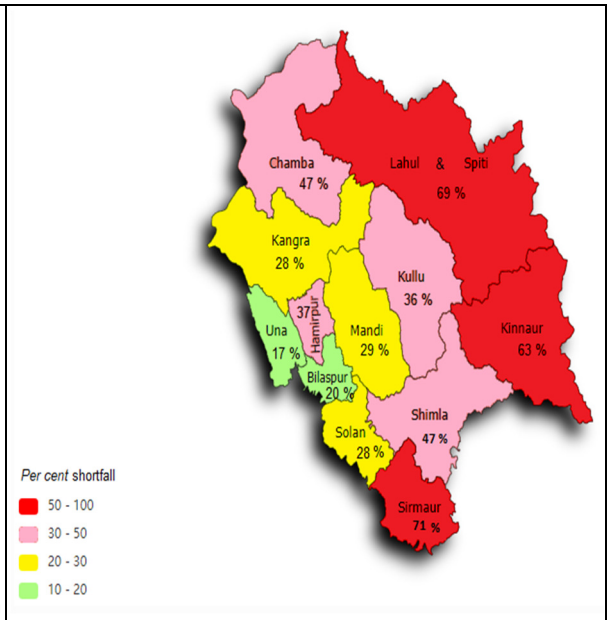


Map 2.2: District-wise shortfall in availability of doctors

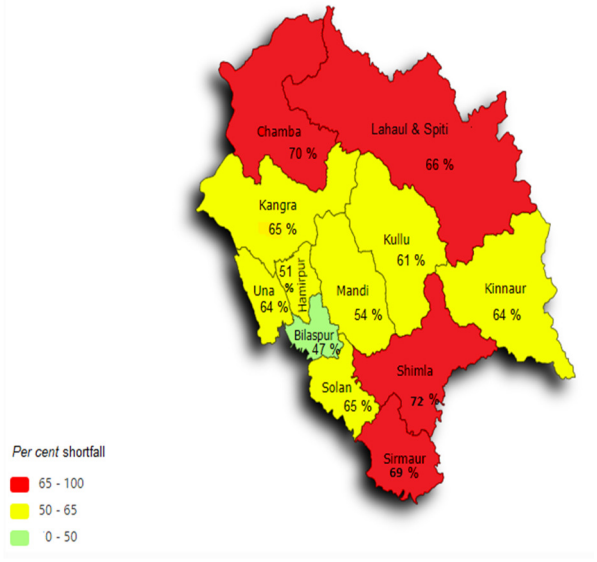
[3] Male / Female Health Worker, Male / Female Health supervisor, Health educator, etc.
[4] Ministerial staff, administrative staff, Supporting staff, etc.



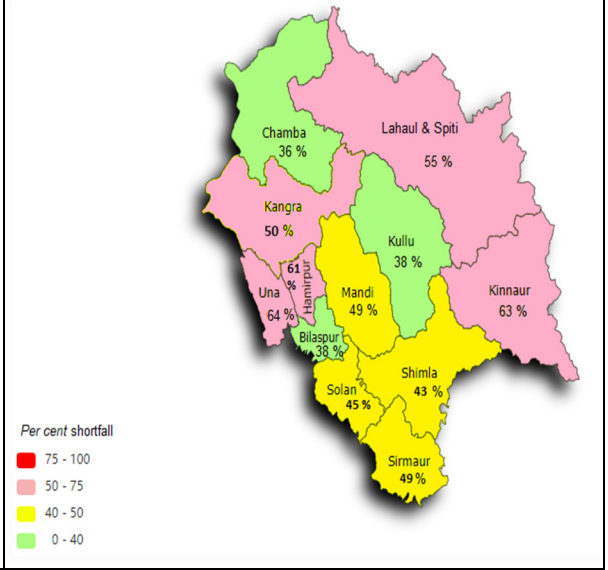
Map 2.3: District-wise shortfall in availability of nursing staff



Map 2.4: District-wise shortfall in availability of paramedical staff



Map 2.5 : District-wise shortfall in availability of public health staff



Map 2.6 : District-wise shortfall in availability of other staff

As evident from the **Maps 2.1** to **2.6**, Audit noticed that distribution of available manpower in the districts was not uniform as detailed below:

- Shortfall of overall manpower was lowest (29 *per cent*) in Bilaspur district and highest (55 *per cent*) in Kinnaur district.
- Shortfall in the category of doctors was lowest (three *per cent*) in Solan district and the highest (46 *per cent*) in Chamba district.
- Shortfall in the category of nursing staff was lowest (two *per cent*) in Bilaspur and highest (52 *per cent*) in Kinnaur district.
- Shortfall in the category of paramedical staff was lowest (17 *per cent*) in Una and highest (71 *per cent*) in Sirmaur.

- Shortfall in the category of public health staff was lowest (47 *per cent*) in Bilaspur and highest (72 *per cent*) in Shimla district.
- Shortfall in the category of other staff was lowest (36 *per cent*) in Chamba and highest (64 *per cent*) in Una district.

2.2 Availability of doctors, specialists, nurses, paramedical staff etc. in health institutions level-wise

Shortages of doctors, specialists, nurses, paramedical staff, etc. were observed in almost all health institutions at all levels, compromising the quality of healthcare being administered to the intended beneficiaries.

2.2.1 Availability in Tertiary Level Health Institutions

Audit scrutiny revealed that there was shortage of manpower in different categories in the six Government medical college hospitals and one super speciality institute[5] across the State as of March 2023 when compared with the State sanctioned strength as detailed in **Charts 2.2** to **2.5**.

Chart 2.2: Status of doctors (including specialists)

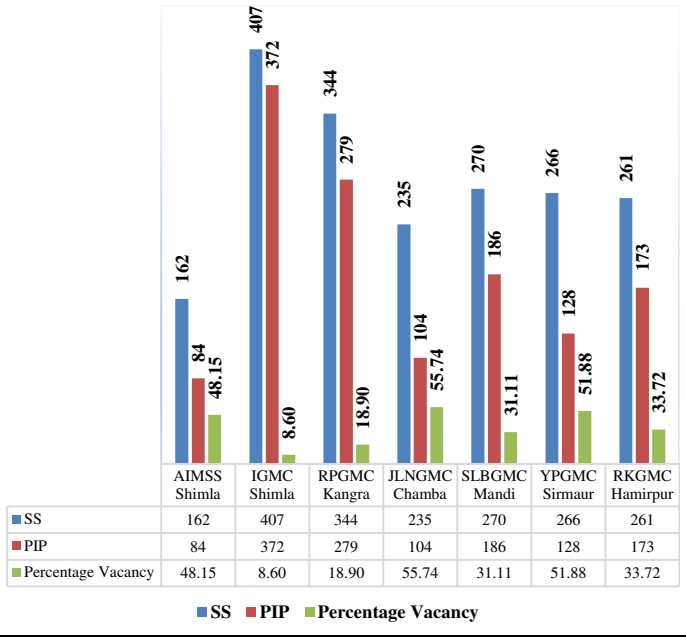
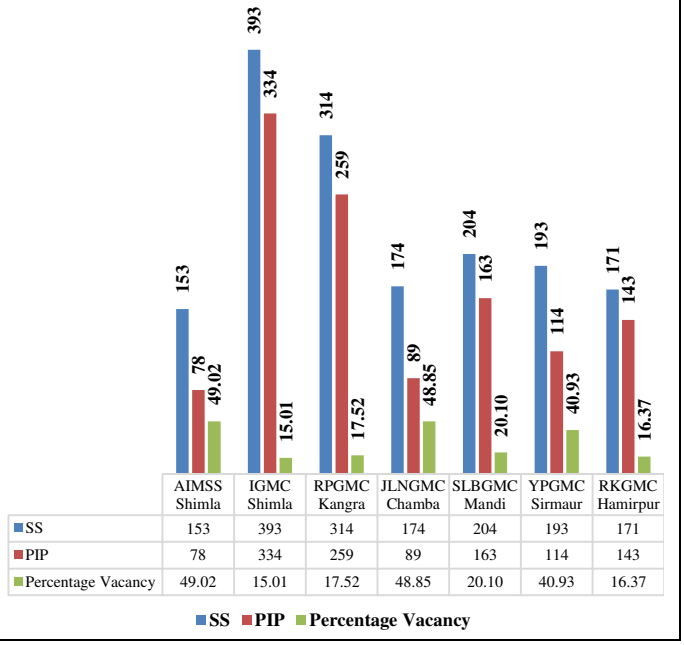
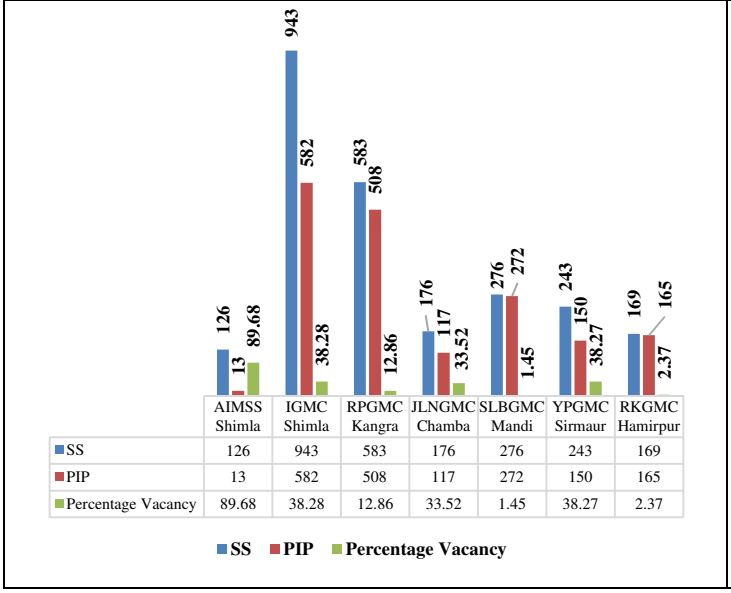


Chart 2.3: Status of specialists



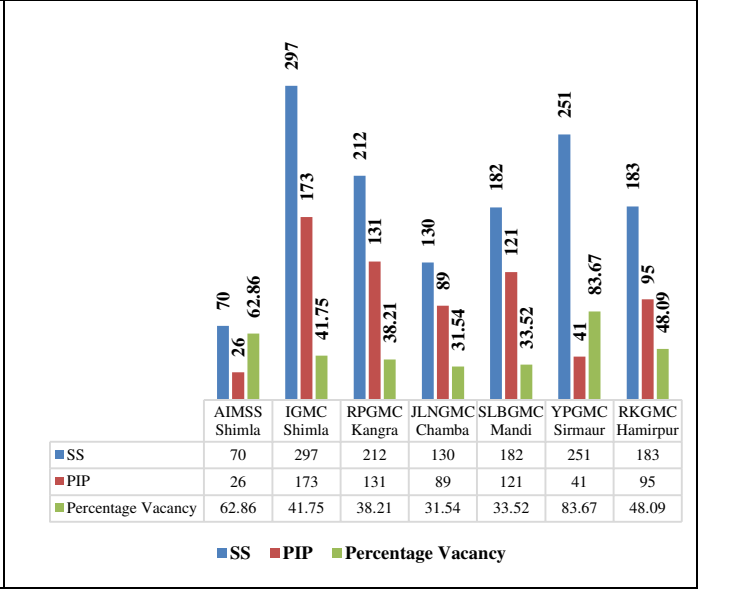
[5] AIMSS- Atal Institute of Medical Super Specialities (Shimla), IGMC- Indira Gandhi Medical College (Shimla), RPGMC- Rajendra Prasad Government Medical College (Kangra), JLNGMC- Jawahar Lal Nehru Government Medical College (Chamba), SLBSGMC- Shri Lal Bahadur Shastri Government Medical College (Mandi), YSPGMC- Yashwant Singh Parmar Government Medical College (Sirmaur), RKGMC- Radha Krishnan Government Medical College (Hamirpur).

Chart 2.4: Status of nursing staff



	AIMSS Shimla	IGMC Shimla	RPGMC Kangra	JLNGMC Chamba	SLBGMC Mandi	YPGMC Sirmaur	RKGMC Hamirpur
SS	126	943	583	176	276	243	169
PIP	13	582	508	117	272	150	165
Percentage Vacancy	89.68	38.28	12.86	33.52	1.45	38.27	2.37

Chart 2.5: Status of paramedical staff



	AIMSS Shimla	IGMC Shimla	RPGMC Kangra	JLNGMC Chamba	SLBGMC Mandi	YPGMC Sirmaur	RKGMC Hamirpur
SS	70	297	212	130	182	251	183
PIP	26	173	131	89	121	41	95
Percentage Vacancy	62.86	41.75	38.21	31.54	33.52	83.67	48.09

As evident from the **Charts 2.2** to **2.5**, Audit noticed that distribution of available manpower in the Medical College Hospitals was not uniform as detailed below:

- Shortfall in the category of doctors was lowest (nine *per cent*) in IGMC hospital, Shimla and the highest (56 *per cent*) in Jawahar Lal Nehru Government Medical College hospital, Chamba.
- Shortfall in the category of specialist was lowest (15 *per cent*) in IGMC hospital, Shimla and highest (49 *per cent*) in Atal Institute of Medical Super Specialities hospital, Shimla.
- Shortfall in the category of nursing staff was lowest (one *per cent*) in Shri Lal Bahadur Shastri Government Medical College hospital, Mandi and highest (90 *per cent*) in Atal Institute of Medical Super Specialities hospital, Shimla.
- Shortfall in the category of paramedical staff was lowest (32 *per cent*) in Jawahar Lal Nehru Government Medical College hospital, Chamba and highest (84 *per cent*) in Yashwant Singh Parmar Government Medical College hospital, Sirmaur.

2.2.1.1 Availability in selected Tertiary Level Health Institutions

The details of available manpower in major categories in the selected tertiary health institutions are shown in **Table 2.2**.

Table 2.2: Showing the position of manpower as on 31st March 2023

Cadre	Major Category	IGMC, Shimla (Including AIMSS Chamiana, Shimla)			RPGMC, Kangra		
		SS	PIP	Shortfall (*per cent*)	SS	PIP	Shortfall (*per cent*)
Doctors	Professor	77	70	7 (9)	40	31	9 (23)
	Associate Professor	76	52	24 (32)	45	23	22 (49)
	Assistant Professor	158	147	11 (7)	81	95	-
	Sr. Resident	227	136	91 (40)	146	97	49 (34)

Cadre	Major Category	IGMC, Shimla (Including AIMSS Chamiana, Shimla)			RPGMC, Kangra		
		SS	PIP	Shortfall (*per cent*)	SS	PIP	Shortfall (*per cent*)
	Other Specialists	9	8	1 (11)	3	14	-
	MO	22	43	-	29	19	10 (34)
	Total	**569**	**456**	**134 (24)**	**344**	**279**	**90 (26)**
Other staff	Staff Nurses	1,069	595	474 (44)	583	508	75 (13)
	Paramedical staff	367	199	168 (46)	212	131	81(38)
	Total	**1,436**	**794**	**642 (45)**	**795**	**639**	**156 (20)**
Grand Total		**2,005**	**1,250**	**776 (39)**	**1,139**	**918**	**246^ (22)**

Source: Information provided by the Health Institutions.

SS-Sanctioned strength, PIP-Person in position. ^ Excesses not considered while calculating shortfall

As seen from **Table 2.2**, when compared with the State sanctioned strength, there were shortages across above mentioned categories, with overall shortage of 39 and 22 *per cent* in IGMC, Shimla and RPGMC, Kangra respectively.

2.2.1.2 IGMC Shimla

- There was overall shortage of 134 doctors in IGMC Shimla (including AIMSS Chamiana, Shimla) as of March 2023 (Professor - nine *per cent*, Associate Professor-32 *per cent*, Assistant Professor - seven *per cent* and Sr. Resident- 40 *per cent*) against the State sanctioned strength of 569.
- Against the sanctioned post of 22 Medical Officers (MOs), the medical college had 43 MOs posted as of March 2023.
- There was an overall shortage of 44 *per cent* of staff nurses when compared with the State sanctioned strength as of March 2023. Similarly, 46 *per cent* shortage was also noticed in paramedical staff.
- In IGMC Shimla, as of September 2022, shortfall was noticed in the emergency medicine department where against sanctioned strength of one, two and four in Professor, Associate Professor and Assistant Professor categories respectively, no manpower was posted whereas one person was posted against sanctioned strength of 16 in the Sr. Resident category. In ENT department, one person each was posted in Professor and Associate Professor against the sanctioned strength of two each, for both the categories. Similarly, Anaesthesia department had a vacancy of four Assistant Professors against the prescribed manpower of 11.
- Medical colleges follow National Medical Commission (NMC) norms which prescribe minimum requirements to run a medical college. In case of human resources, availability of manpower above the minimum prescribed strength may be treated as a good parameter. During the course of audit of IGMC Shimla, it was noticed that as per NMC norms, the medical college had shortage of seven doctors as of September 2022 (Professor, Associate Professor, and Assistant Professor) in certain departments. Shortage of one Associate Professor each was noticed in biochemistry, community medicine, psychiatry,

microbiology and emergency medicine departments. In Professor and Assistant Professor cadre, shortage of one person in each cadre was noticed in emergency medicine.

2.2.1.3 RPGMC Kangra

- There was overall shortage of 90 doctors in RPGMC Kangra as of March 2023 (Professor-23 *per cent*, Associate Professor- 49 *per cent* and Sr. Resident-34 *per cent*) against the State sanctioned strength of 344.
- There was overall shortage of 13 and 38 *per cent* in the cadre of nurses and paramedical staff respectively as of March 2023
- Hundred *per cent* shortages as of June 2022 were noticed in the department of anatomy (Associate Professor), blood bank (Professor and Associate Professor), nephrology (Professor, Associate Professor and Assistant Professor), chest and TB (Associate Professor, Assistant Professor and Sr. Resident) etc.
- When compared with NMC norms which prescribe minimum standards, the college had a shortfall of 41 doctors as of June 2022 (Professor, Associate Professor, Assistant Professor and Sr. Resident). Major shortages were noticed in the department of physiology (Professor-one, Assistant Professor- three and Sr. Resident- three), chest & tuberculosis (one in each cadre of Associate Professor, Assistant Professor and Sr. Resident), anatomy (one in each cadre of Associate professor and Assistant Professor and three in Sr. Resident), biochemistry (Associate Professor- one and Sr. Resident-three) etc.
- Due to non-posting of any staff in nephrology and emergency medicine departments, these departments were non-functional as on June 2022, which deprived the patients of the intended facilities.

In reply, it was stated by the Principal, R.P. Government Medical College Kangra, that posts of Associate Professors and Professors are promotional posts, and these posts would be filled as and when the incumbent would be eligible.

- **Non-availability of manpower resulting in idling of machinery and equipment**

  In the Department of Cardio-Thoracic and Vascular Surgery (CTVS) of RPGMC, two heart lung machines were purchased in November 2016 for ₹ 1.56 crore, out of which, one heart lung machine was transferred to IGMC Shimla in March 2017 and another heart lung machine was lying idle due to non-availability of manpower (perfusionist[6]) since November 2016. The department took up the matter with the higher authorities, but no machine operator was deployed till the date of audit and the machine valued at ₹ 0.78 crore was lying idle.

2.2.2 Availability in secondary and primary levels health institutions

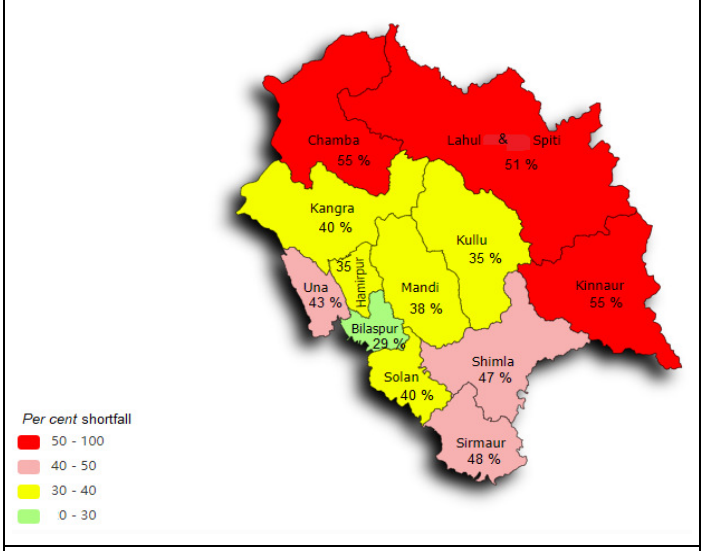
The details of status of availability of overall human resources in the primary and secondary level health institutions across the State is discussed below. The availability of overall human

[6] They operate the heart lung bypass machine during heart surgery.

resources of DH Chamba, Hamirpur and Sirmaur has not been included as in these districts the DH is attached with the medical college.

The status of availability of overall human resources in primary and secondary level health institutions across the State when compared with the State sanctioned strength as of March 2023 is shown in **Map 2.7**.

As evident from the **Map 2.7**, overall shortfall of manpower was lowest (29 *per cent*) in Bilaspur district and highest (55 *per cent*) in Kinnaur and Chamba districts.



Map 2.7: District-wise shortfall in availability of overall manpower in primary and secondary level health institutes

2.2.2.1 Availability of overall human resource at primary and secondary levels health institutions in the selected districts

The availability of human resources at primary and secondary levels health institutions in selected districts has been analysed as per the State sanctioned strength. The details of available manpower in the selected districts are shown in **Table 2.3**.

Table 2.3: Human Resource status in major categories in the selected districts as on 31/03/2023

SS/MIP*	SS	MIP	SS	MIP	SS	MIP	SS	MIP	Shortfall (*per cent*)
Districts / Category	Kinnaur		Solan		Kangra		Total		
Medical Officer and Administrative Staff	88	69	169	164	496	412	753	645	14.34
Ministerial Staff	46	14	65	45	159	88	270	147	45.56
Paramedical Staff	87	32	165	121	510	388	762	541	29.00
Public Health Staff	124	45	445	155	1,094	389	1,663	589	64.58
Nursing Staff	66	32	173	140	634	454	873	626	28.29
Supporting Staff / Class IV/ Others	147	57	247	131	582	328	976	516	47.13
Total	**558**	**249**	**1,264**	**756**	**3,475**	**2,059**	**5,297**	**3,064**	**42.16**

Source: Information provided by the Health Institutions.
**SS: Sanctioned Strength, MIP: Men-in-position.*

As evident from **Table 2.3**, there was a shortfall of 42.16 *per cent* in all categories with respect to the State sanctioned strength in the selected districts. Major shortages in the following cadres were noticed:

- 64.58 *per cent* shortage was noticed in the cadre of Public health staff, due to which 39 *per cent* of health sub centres were functioning without staff in the State as discussed in **Para 2.2.7**.
- 28.29 *per cent* shortage was noticed in the cadre of Nursing staff, which deprived the patients of special care and assistance to doctors in areas like operation theatres, intensive care unit etc.

- 29 *per cent* shortage was also noticed in paramedical staff, due to which X-ray machines were lying unutilised in the selected districts, thereby depriving the patients of intended benefits as discussed in **Para 2.2.5.4**.
- Amongst the three selected districts, Kinnaur had the lowest availability of manpower (44.62 *per cent*) whereas Solan had the highest availability of manpower (59.81 *per cent*) amongst all cadres.

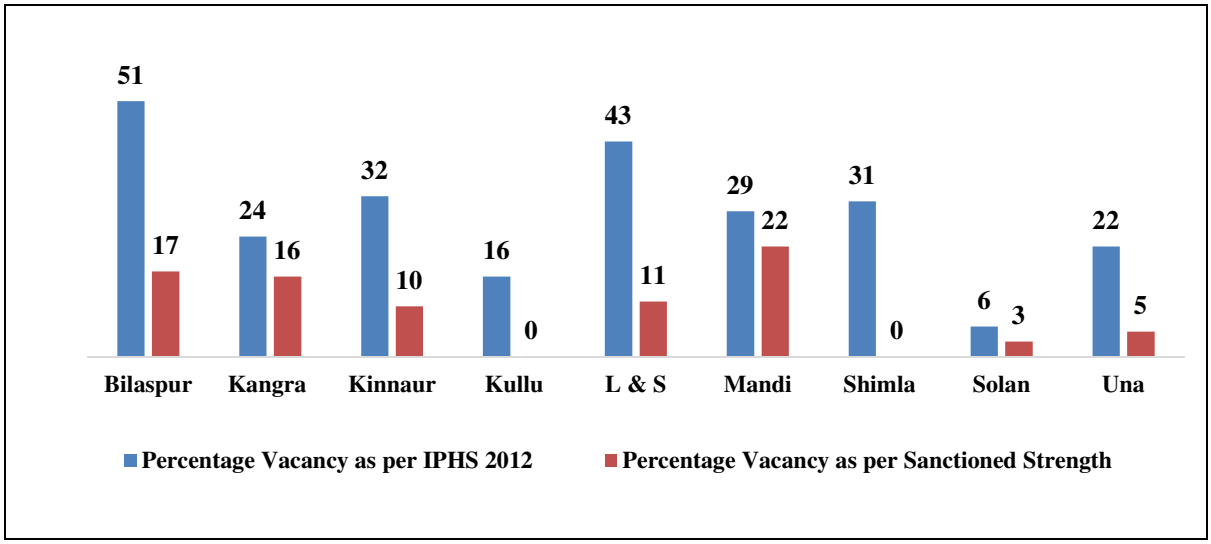
2.2.2.2 Availability of doctors in district hospitals

The availability of doctors (including specialists) in district hospitals has been analysed as per the State sanctioned strength and with IPHS norms 2012.

As per IPHS norms 2012, a DH having a bed strength of 100, 200, 300, 400 should have 28, 33, 49 and 56 doctors respectively (AYUSH doctors excluded).

The details of status of availability of doctors in the district hospitals across the State as of March 2023 are shown in **Chart 2.6**.

Chart 2.6: Shortfall of Doctors (*per cent*)

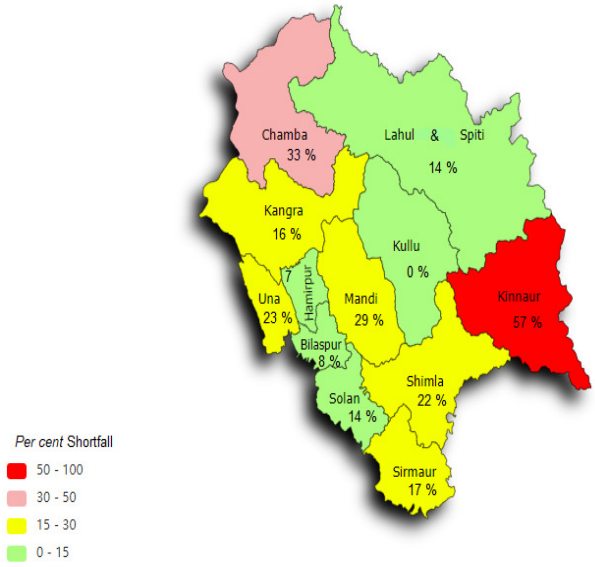


Hence, from **Chart 2.6**, shortfall in doctor category in District hospitals:

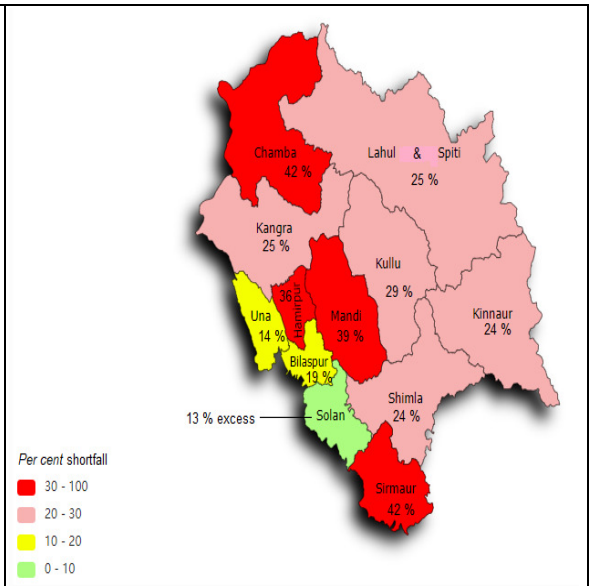
- When compared with IPHS norms 2012, was lowest (six *per cent*) in Solan and highest (51 *per cent*) in Bilaspur district.
- When compared with the State sanctioned strength, was lowest (three *per cent*) in Solan district and highest (22 *per cent*) in Mandi district. There was no shortfall in Kullu and Shimla districts.

2.2.2.3 Availability of doctors in CHs and CHCs district-wise

The availability of doctors (including Specialists) in CHs and CHCs district-wise has been analysed as per the State sanctioned strength. The details of status of availability of doctors (including Specialists) in CHs and CHCs district-wise across the State as of March 2023 when compared with the State sanctioned strength are shown in **Map 2.8** and **Map 2.9** respectively.



Map 2.8: District-wise shortfall in availability of doctors (including Specialists) in CHs



Map 2.9: District-wise shortfall in availability of doctors (including Specialists) in CHCs

From the **Maps 2.8 and 2.9** it is seen that:

- The shortfall in availability of doctors (including Specialists) in CHs, when compared with the State sanctioned strength, was lowest (seven *per cent*) in Hamirpur district and highest (57 *per cent*) in Kinnaur district. There was no vacancy in Kullu district.
- The shortfall in availability of doctors (including Specialists) in CHCs, when compared with the State sanctioned strength, was lowest (14 *per cent*) in Una district and highest (42 *per cent*) in Chamba and Sirmaur districts. However, there were 13 *per cent* doctors in excess of the State sanctioned strength in the CHCs in Solan district.

2.2.2.4 Availability of doctors in PHCs district-wise

The details of status of availability of doctors in PHCs district-wise across the State as of March 2023 are shown in **Map 2.10**.

Map 2.10: Shortfall of doctors in PHCs district-wise when compared with State sanctioned strength

From **Map 2.10**, it can be seen that the shortfall in availability of doctors (including Specialists) in PHCs when compared with the State sanctioned strength, was lowest (five *per cent*) in Solan district and highest (33 *per cent*) in Sirmaur district.

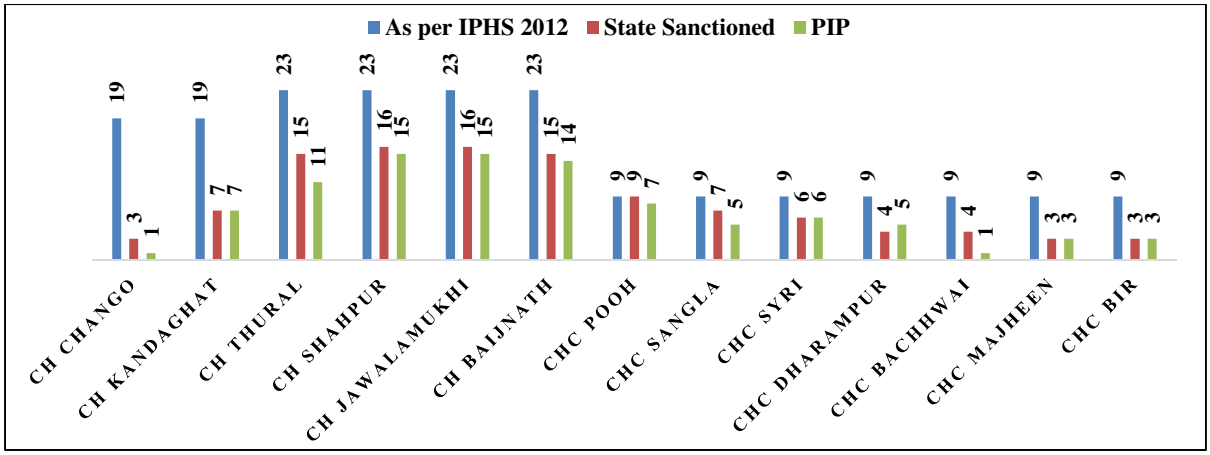
As per information collected from DHS, it was noticed that 98 PHCs[7] were running without doctors as of March 2023.

2.2.2.5 Comparison of doctors against IPHS norms/State sanctioned strength in selected Health institutions (CHs and CHCs)

Shortage of doctors with respect to IPHS norms and State sanctioned strength as of March 2023 was noticed in the selected units (six CHs and seven CHCs). As per IPHS norms 2012, a CH having 31-50 beds and 51-100 beds should have 19 and 23 doctors respectively. In CHC (30 beds), IPHS norms 2012 norms prescribe nine doctors.

The status of availability of doctors in the selected CHs and CHCs as compared to the IPHS norms 2012 and State sanctioned strength, as of March 2023 is given in **Chart 2.7**.

Chart 2.7: Status of availability of doctors against both IPHS norms 2012 and State norms in the selected health institutions as of March 2023



From **Chart 2.7,** it can be seen that:

- In the selected CHs, the lowest number of doctor (one) was available in CH, Chango and highest (15) in CHs, Shahpur and Jawalamukhi.
- In the selected CHCs, the lowest number of doctor (one) was available in CHC, Bachhwai and highest (eight) in CHC, Pooh.

Vacancy in healthcare human resource adversely impacts the delivery of medical services to the patients/beneficiaries. Hence, the State needs to take immediate steps for recruitment/ deployment of adequate human resources in the health institutions at various levels.

2.2.3 Availability of Specialists in secondary health institutions

Government of India, Ministry of Health and Family Welfare during February 2016, directed all the States to strengthen specialist support in public health facilities (DHs/CHs/CHCs).

[7] Bilaspur- six, Chamba- seven, Hamirpur- two, Kangra-nine, Kinnaur-three, Kullu- seven, Mandi-25, Shimla-18, Sirmaur-16, Solan-three and Una-two.

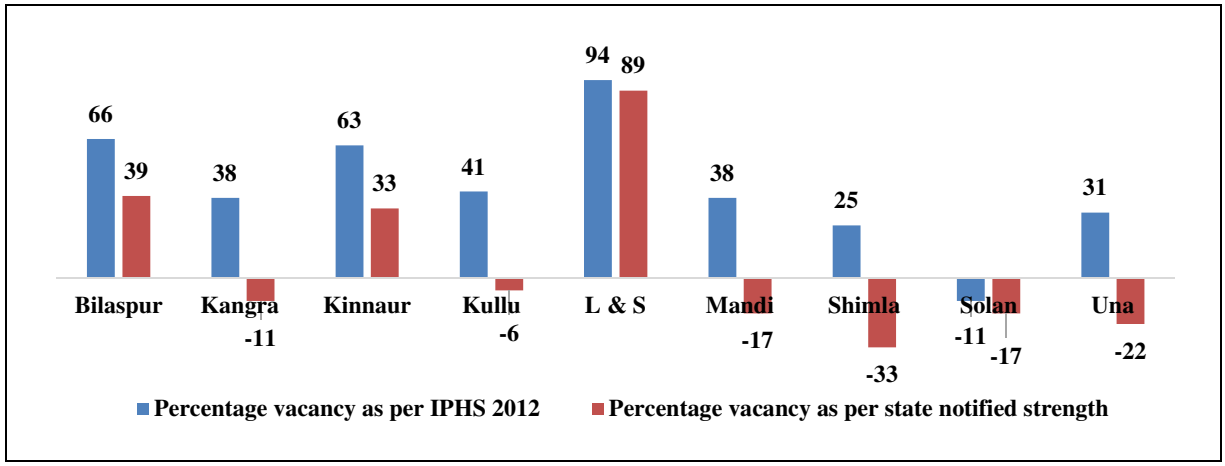
Contrary to the above instruction of GoI, Audit noticed that there was huge shortage of specialists in secondary health institutions as discussed in the succeeding paragraphs.

2.2.3.1 Non-availability of Specialists in district hospitals in the State

Government of Himachal Pradesh vide notification dated March 2013 had notified the requirement of 18 and nine specialists for zonal and regional hospitals (non-tribal) and regional hospitals (tribal) respectively. As per IPHS norms 2012, a DH having a bed strength of 100, 200, 300, 400 should have 16, 19, 32 and 34 specialists (excluding dentists and AYUSH) respectively.

Audit noticed that posts of specialists have not been sanctioned for any of the health institutions at secondary level. Status of non-availability of specialists in DHs district-wise as of March 2023 w.r.t. IPHS norms 2012 and State notified strength are as detailed in **Chart 2.8**.

Chart 2.8: Shortfall of Specialists in DHs (*per cent*)



Note: Availability of specialists was in excess of IPHS norms 2012 in DH Solan (11 per cent). When compared with the state notified strength, six[8] out of nine DHs had specialists in excess of notified strength.

From **Chart 2.8**, it can be seen that:

- When compared with IPHS norms 2012, shortfall of specialists in District hospitals was lowest (25 *per cent*) in Shimla and highest (94 *per cent*) in Lahaul & Spiti district.
- When compared with State notified strength, shortfall of specialists in District hospitals was lowest (33 *per cent*) in Kinnaur, and highest (89 *per cent*) in Lahaul & Spiti district.

Availability of specialists was in excess of IPHS norms 2012 in DH Solan. When compared with the state notified strength, six out of nine DHs shown in **Chart 2.8** had specialists in excess of the notified strength.

2.2.3.2 Non-availability of Specialists in the selected District Hospitals

As per IPHS norms 2012, a DH should be provided with specialised Outpatient Department (OPD) services related to ENT, general medicine, ophthalmology, paediatrics, dermatology &

[8] Kangra (11 *per cent*), Kullu (six *per cent*), Mandi (17 *per cent*), Shimla (33 *per cent*), Solan (17 *per cent*) and Una (22 *per cent*)

venereology, orthopaedics, gynaecology etc. Status of non-availability of important specialists in the test-checked DHs during the period 2016-21 is detailed in **Table 2.4**.

Table 2.4: Period of non-availability of specialists in test checked DHs

DHs	Department	Period of non-availability of specialists		Number of years
		From	To	
Kinnaur	ENT	April 2016	October 2021	5
	General Medicine	April 2016	March 2019	3
	Paediatrics	April 2016	October 2021	5
	Dermatology & Venereology	April 2016	October 2021	5
	Psychiatry	April 2016	October 2021	5
	Orthopaedics	April 2016	October 2021	5
	Gynaecology	April 2016	March 2018	2
Solan	Psychiatry	January 2016	June 2019	3
Kangra	Orthopaedics	April 2016	December 2021	5

Source: Information provided by the Health Institutions.

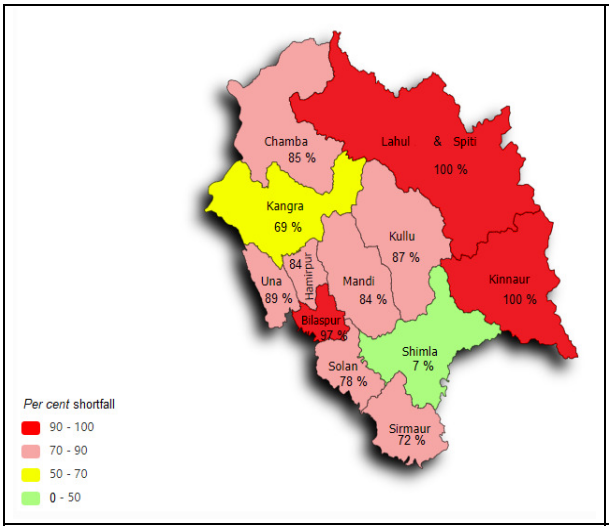
From **Table 2.4**, it is observed that during the period 2016-21:

- In DH Kinnaur, specialists in the departments of ENT, general medicine, paediatrics, dermatology & venereology, psychiatry, orthopaedics and gynaecology were not available for periods ranging from two to five years. Due to non-posting of gynaecologist in DH Kinnaur during 2016-17 to 2017-18, 923 deliveries were conducted without regular specialists.
- In DH Solan, post of psychiatrist was not filled for a period of three years.
- In DH Kangra, orthopaedic was not available for the entire period of five years.

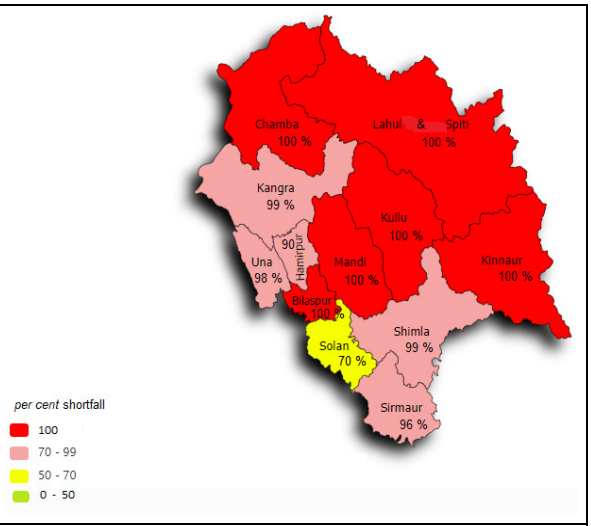
2.2.3.3 Non-availability of Specialists in CHs and CHCs district-wise in the State

Government of Himachal Pradesh vide notification dated March 2013 had notified the requirement of nine specialists for civil hospitals. As per IPHS norms 2012, a CH should have a minimum of nine specialists. As per IPHS norms 2012, a CHC should have five specialists and the State Government has not specified the availability of the same.

Status of non-availability of specialists in CHs, district-wise, as of March 2023 w.r.t. IPHS norms 2012 and State notified strength are detailed in **Map 2.11**. The status of non-availability of specialists in CHCs, district-wise, w.r.t. IPHS norms 2012 is shown in **Map 2.12**.



Map 2.11: Shortfall of specialists as per IPHS norms 2012 and State notified strength in Civil Hospitals (as both norms have same requirement)



Map 2.12: Shortfall of specialists as per IPHS norms 2012 in CHCs

From **Maps 2.11** and **2.12**, it can be seen that:

- The shortfall in specialists in CHs, when compared with IPHS norms 2012 and State notified strength was lowest (seven *per cent*) in Shimla district and highest (100 *per cent*) in Lahaul & Spiti and Kinnaur districts.
- The shortfall in specialists in CHCs, when compared with IPHS norms 2012, was lowest (70 *per cent*) in Solan, and highest (100 *per cent*) in Lahaul & Spiti, Kinnaur, Chamba, Bilaspur, Kullu and Mandi districts.

2.2.3.4 Non-availability of Specialists in the selected Civil Hospitals

IPHS norms 2012 envisages having specialists in civil hospital (CH) in departments of general orthopaedics, obstetrics & gynaecology, paediatrics, anaesthesia, ophthalmology, ENT, dental, etc. Further, the State Government notified in April 2016 to have specialists for 100 and 200 bedded hospitals.

Status of non-availability of important specialists in the test-checked CHs during the period covered in audit i.e., 2016-21 are detailed in **Table 2.5**.

Table 2.5: Period of non-availability of specialist in test checked CHs during 2016-21

Departments	Chango*	Kandaghat	Thural	Jawalamukhi	Shahpur	Baijnath
Orthopaedics	5 years	5 years	5 years	5 years	4 years 5 months	5 years
Paediatrics	5 years	3 years	Available	3 years	3 years	Available
Gynaecology	5 years	5 years	Available	5 years	4 years 10 months	5 years
Ophthalmology	5 years	5 years	5 years	4 years	5 years	Available
ENT	5 years	5 years	Available	4 years	4 years 5 months	Available
Dental	5 years	Available	Available	Available	Available	Available

Source: Information provided by the Health Institutions.

** Since inception.*

From **Table 2.5**, it can be observed that during 2016-21:

- In CH Chango, none of the six specialists was posted.
- In CH Kandaghat, only dental specialist was available for the whole period while other five specialists were not available for a period ranging from three to five years.
- In CH Thural, four specialists viz., paediatrician, gynaecologist, ENT, and dental were available for the whole period but orthopaedics and ophthalmologist were not available for the entire duration.
- In CH Jawalamukhi and CH Shahpur, only dental specialist was available for the whole period while other five specialists were not available for a period ranging from three to five years.
- In CH Baijnath, orthopaedics and gynaecologist were not available during the entire period.

There was non-availability of gynaecologists in health institutions of the selected districts. Out-of-pocket expenditure in the State per delivery in a public health facility increased from ₹ 3,329/- to ₹ 3,760/- during 2015-16 to 2019-21, which is higher than the national average (₹ 3,197 in 2015-16 and ₹ 2,916 in 2019-21) as per NFHS-4 and NFHS-5 respectively. The increase in out-of-pocket expenditure in the State per delivery due to the non-availability of gynaecologists could not be ruled out.

2.2.3.5 Partial utilisation of surgeons due to non-posting of anesthetist and vice versa

IPHS norms 2012 envisaged that an operation theatre (OT) usually should have a team of surgeons, anesthetists, nurses and sometimes pathologists & radiologists to operate upon and to take care of the patients.

In the nine selected health institutions (three DHs and six CHs), it was noticed that in four health institutions (one DH and three CHs), surgeon and anesthetist were not posted during the same time frame as detailed in **Table 2.6**.

Table 2.6: Showing surgeon and anesthetic not posted in same time frame

Health institutions	Particulars	Impact
DH Kinnaur	No anesthetist was posted from August 2016 to April 2018 while surgeon was posted. Anesthetist was posted during April 2018 and relieved in November 2020.	Major surgeries might have been conducted without the guidance of anesthetist from August 2016 to April 2018 and November 2020 onwards.
CH Kandaghat	Anaesthetist was posted from December 2018 to June 2019 and a surgeon was posted from July 2020 onwards.	Services of the anesthetist were not utilised during December 2018 to June 2019 as surgeon was not posted during that period.
CH Jawalamukhi	Anesthetist was posted from July 2020 but no surgeon was posted.	Anesthetist service could not be utilised due to non-availability of surgeon. He worked as General Duty Medical Officer (GDMO).
CH Baijnath	Anesthetist was posted but no surgeon was posted from December 2021 to May 2022.	Anesthetist service could not be utilised due to non-availability of surgeon.

CH Kandaghat replied (January 2022) that the posting of specialists was done at Directorate level. CH Jawalamukhi in its reply (January 2022) stated that the matter will be taken up with DHS.

Thus, DHs and CHs failed to provide comprehensive healthcare to the citizens due to non-availability of all the required specialists. Shortfall of important specialists in DHs and CHs indicates that patients had to be either referred to tertiary heath institutions or to private hospitals, entailing additional financial burden on the patients. High average annual OPD load during 2016-22 (RPGMC- 4.67 lakh and IGMC/KNSH- 7.25 lakh) in the nearby medical college hospitals was noticed.

2.2.3.6 Irregular deployment of specialists in selected health institutions

- One dental doctor posted in CHC Majheen was deputed to DH Kangra in September 2020 as per the orders of the Government. There were already three dental doctors posted there against the sanctioned strength of three, thereby creating an excess deployment. Due to posting of doctor in other health institutions, inhabitants of that area were deprived of medical services, and they had to visit other health institution (CH Jawalamukhi) by travelling more than 30 km.
- ENT specialist and Chest & TB specialist were posted simultaneously in CHC Dharampur in August 2021, but their salaries were being drawn from the establishment of CH Arki. CHC Dharampur did not have even basic medical equipment required for ENT treatment. Hence, posting of ENT specialist was not justified and posting should have been done considering availability of required equipment. Further, posting of chest/ TB specialist was also not justified as there was already a TB sanatorium within the premises of the hospital where complete treatment for TB is available. Instead, the specialist should have been posted in the health institution where there was dire need of TB specialist.

Similar cases of health professionals posted at different health institutions but drawing salary from other establishments were also noticed which have been pointed out in **Para 2.2.8**.

2.2.4 Availability of nursing staff in secondary and primary health institutions in the State

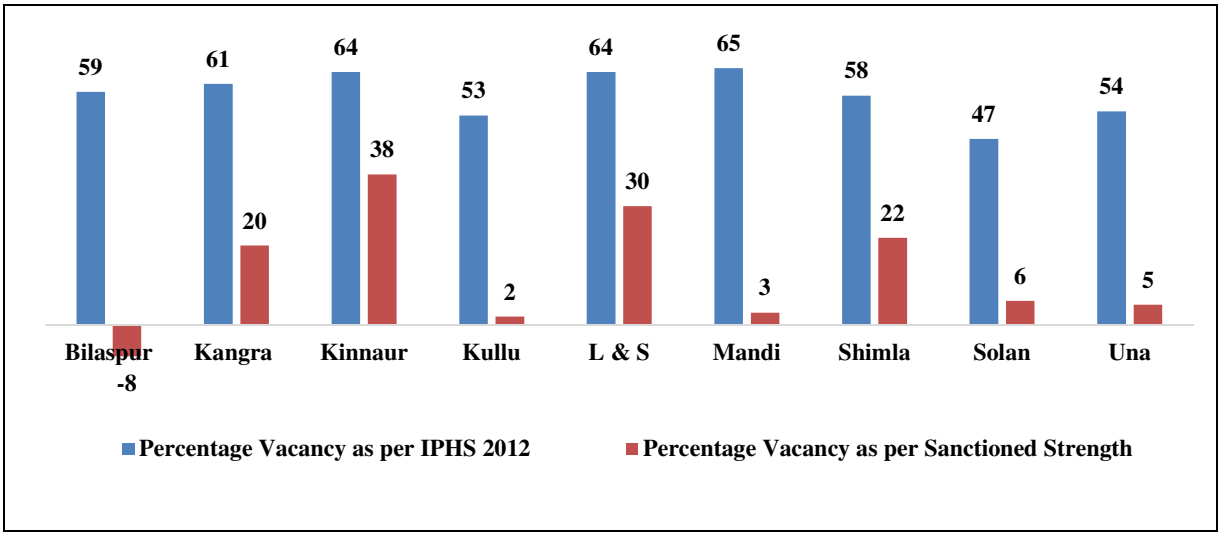
The availability of nursing staff State-wide and in the selected secondary level health institutions (DHs/CHs/CHCs) against the State sanctioned strength and IPHS norms and availability of nursing staff in Primary level health institutions (PHCs) against the State sanctioned strength are discussed in the succeeding paragraphs.

2.2.4.1 Status of availability of nursing staff in district hospitals

IPHS norms 2012 have categorised the availability of the number of nurses in different levels of the hospitals as per bed strength. DHs having 100, 200, 300 and 400 beds should have 45, 90, 135 and 180 nurses respectively.

The details of status of availability of nurses in the district hospitals across the State as of March 2023 are shown in **Chart 2.9**.

Chart 2.9: *Per cent* Vacancy of Nursing Staff in DHs



**DH Chamba, DH Sirmaur and DH Chamba are excluded as they are attached with medical colleges.*

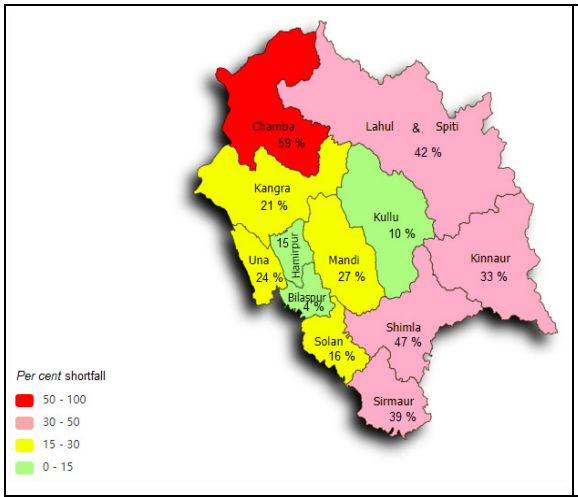
From **Chart 2.9**, it can be seen that shortfall in nursing staff category in District hospitals:

- When compared with IPHS norms 2012, vacancy was lowest (47 *per cent*) in Solan and highest (65 *per cent*) in Mandi district.
- When compared with the State sanctioned strength, vacancy was lowest (three *per cent*) in Mandi and highest (38 *per cent*) in Kinnaur district.

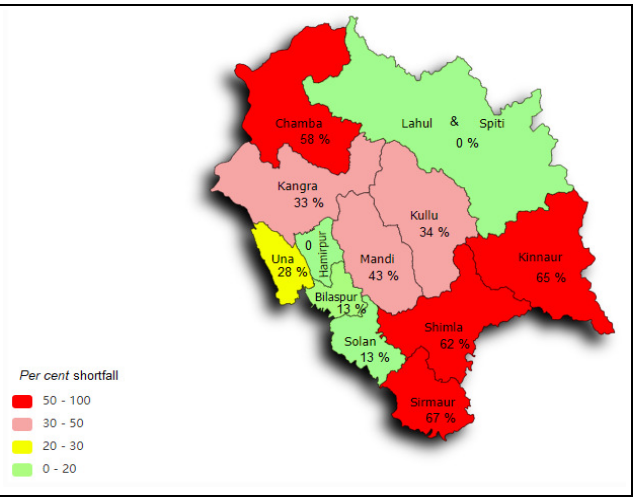
In DH Bilaspur, there was eight *per cent* excess availability of nursing staff as compared to the sanctioned strength.

2.2.4.2 Status of availability of nursing staff in CHs and CHCs

The details of status of availability of nursing staff in the CHs and CHs district-wise across the State when compared with the State sanctioned strength are shown in **Maps 2.13** and **2.14**.



Map 2.13: Shortfall of nursing staff in CHs



Map 2.14: Shortfall of nursing staff in CHCs

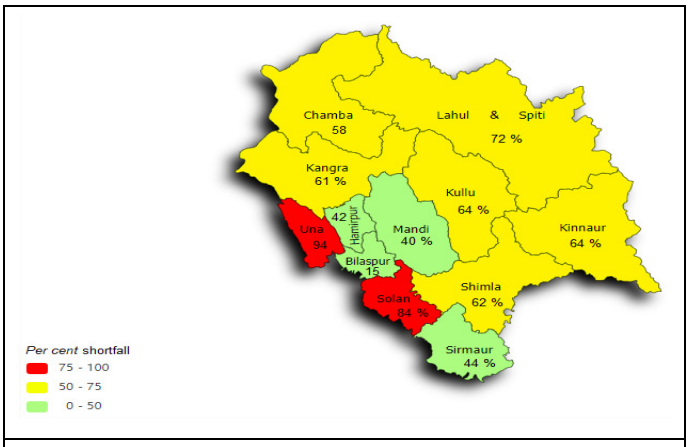
From **Maps 2.13** and **2.14**, it can be seen that shortfall in nursing staff category when compared with the State sanctioned strength:

- In CHs, was lowest (four *per cent*) in Bilaspur and highest (59 *per cent*) in Chamba district.

- In CHCs, was lowest (zero *per cent*) in Lahaul & Spiti and Hamirpur districts and highest (67 *per cent*) in Sirmaur district.

2.2.4.3 Status of availability of nursing staff in PHCs district-wise

The details of status of availability of nursing staff in PHCs district-wise across the State when compared with the State sanctioned strength are shown in **Map 2.15**.



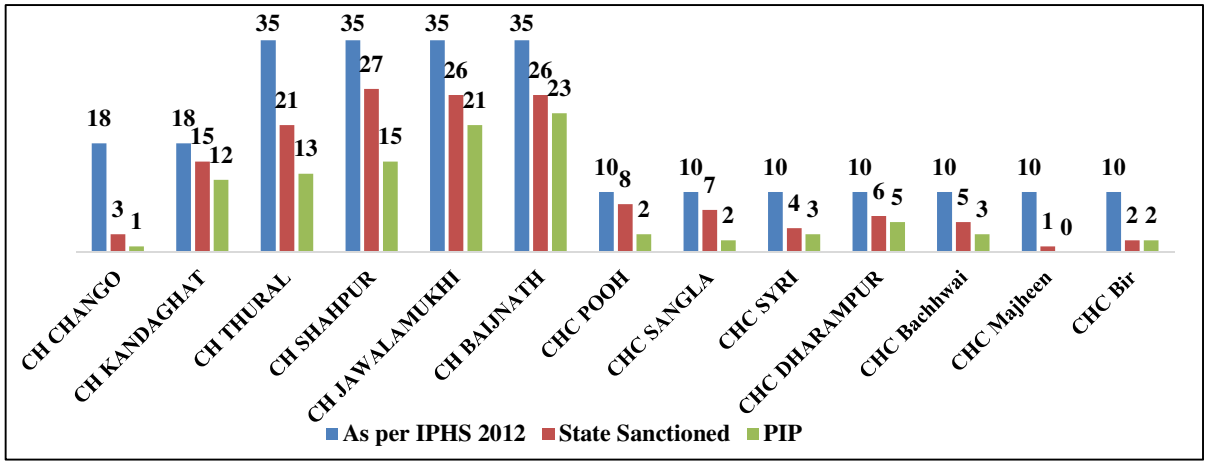
Map 2.15: Shortfall of nursing staff in PHCs

It can be seen from **Map 2.15** that the shortfall in nursing staff category in PHCs when compared with the State sanctioned strength was lowest (15 *per cent*) in Bilaspur and highest (94 *per cent*) in Una district.

2.2.4.4 Status of availability of nursing staff in the selected CHs and CHCs

As per IPHS norms 2012, CHs having bed strength of 31-50 and 51-100 should have 18 and 35 nurses respectively. CHCs with bed strength of 30 should have 10 nurses. The availability of nurses when compared with both IPHS norms 2012 and State sanctioned strength of the selected CHs and CHCs as of March 2023 is shown in **Chart 2.10**.

Chart 2.10: Availability of nursing staff against both IPHS norms 2012 and State norms as of March 2023



From **Chart 2.10**, it can be seen that:

- In selected CHs, the lowest number of nursing staff (one) was available in CH, Chango and highest (23) in CH, Baijnath.

- In selected CHCs, the lowest number of nursing staff (zero) was available in CHC, Majheen and highest (five) in CHC, Dharampur.

Shortage of staff nurses leads to increase in the workload of the existing nurses, which affects the delivery of health services including direct patient care.

2.2.5 Availability of paramedical staff in secondary health institutions in the State

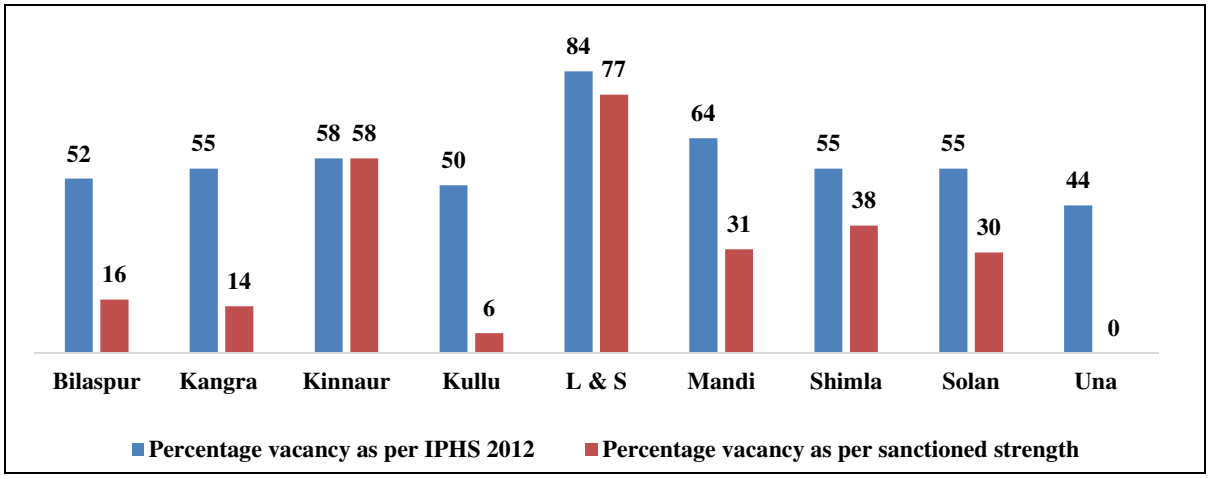
Paramedical staff are responsible for implementation and management of prescribed treatment plan and they also deal with patients in emergent medical situations.

2.2.5.1 Availability of paramedical staff in DHs in the State

IPHS norms 2012 have categorised the availability of the number of paramedical staff at different levels of the hospitals as per bed strength. DHs having 100, 200, 300 and 400 beds should have 31, 42, 66 and 81 paramedical staff respectively.

The status of paramedical staff of DHs across the State as of March 2023 when compared with IPHS norms 2012 and State sanctioned strength is shown in **Chart 2.11**.

Chart 2.11: Vacancy of paramedical staff in DHs (*per cent*)



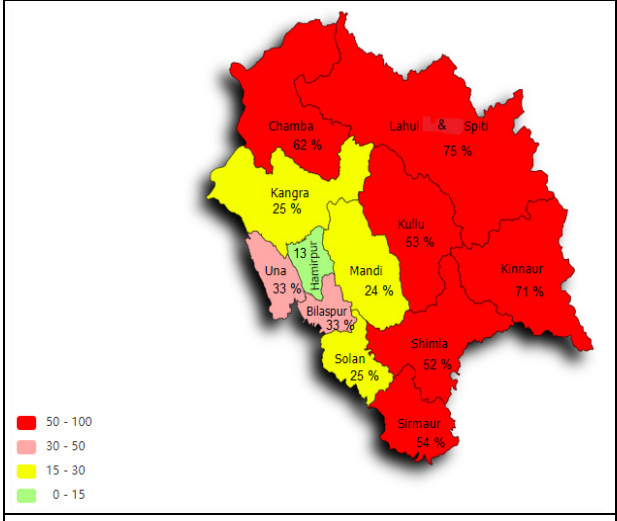
From **Chart 2.11**, it can be seen that shortfall in paramedical staff category in District hospitals:

- When compared with IPHS norms 2012, was lowest (44 *per cent*) in Una and highest (84 *per cent*) in Lahaul & Spiti district.
- When compared with the State sanctioned strength, was lowest (six *per cent*) in Kullu and highest (77 *per cent*) in Lahaul & Spiti district. There was no shortfall in Una district.

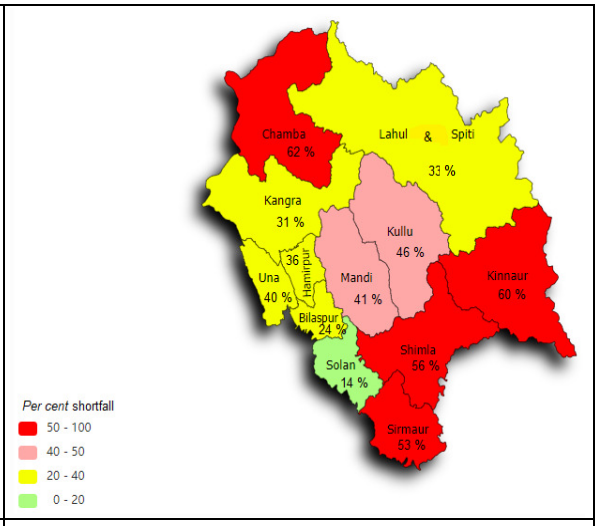
2.2.5.2 Availability of paramedical staff in CHs and CHCs

CHs having bed strength of 31-50 and 51-100 should have 27 and 38 paramedical staff respectively. CHC with bed strength of 30 should have 11 paramedical staff.

The status of paramedical staff of CHs and CHCs across the State as of March 2023 when compared with State sanctioned strength is shown in **Maps 2.16** and **2.17**.



Map 2.16: Shortfall of paramedical staff in Civil Hospitals



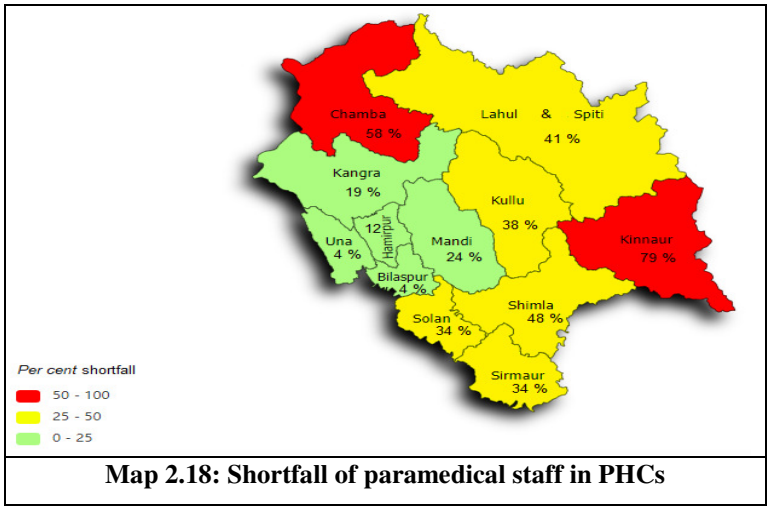
Map 2.17: shortfall of paramedical staff in CHCs

It can be seen from **Maps 2.16** and **2.17** that shortfall in paramedical staff category when compared with the State sanctioned strength:

- In CHs, was lowest (13 *per cent*) in Hamirpur and highest (75 *per cent*) in Lahaul & Spiti district.
- In CHCs, was lowest (14 *per cent*) in Solan and highest (62 *per cent*) in Chamba district.

2.2.5.3 Availability of paramedical staff in PHCs

The status of paramedical staff of PHCs across the State as of March 2023 when compared with the State sanctioned strength is shown in **Map 2.18**:



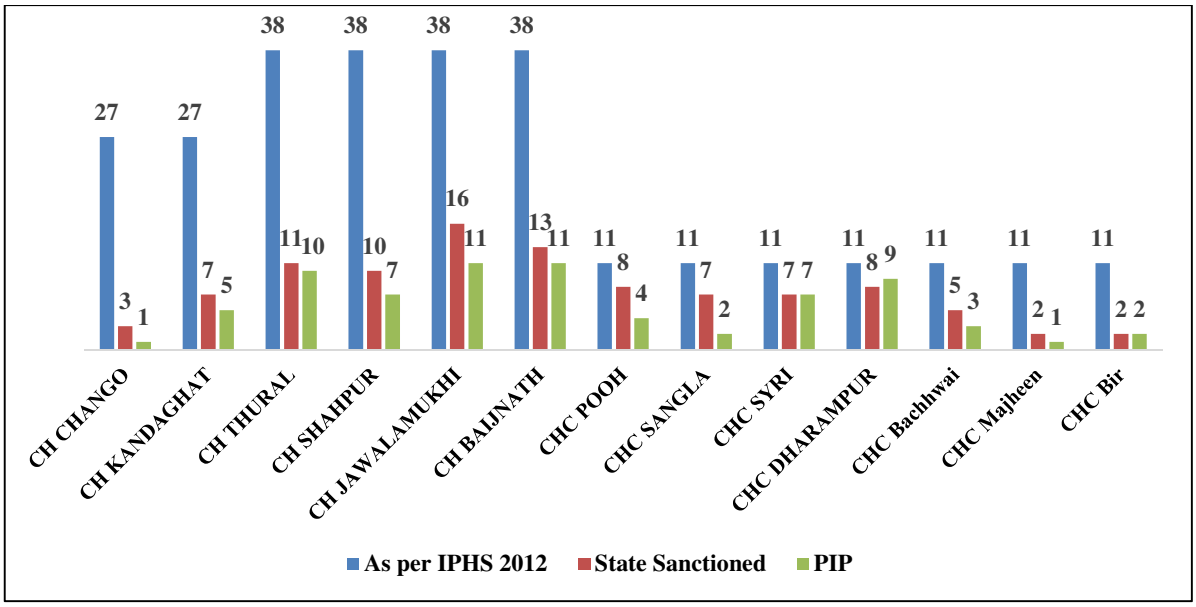
Map 2.18: Shortfall of paramedical staff in PHCs

It is evident from **Map 2.18**, that shortfall in paramedical staff category in PHCs when compared with the State sanctioned strength is lowest (four *per cent*) in Bilaspur and Una and highest (79 *per cent*) in Kinnaur district.

2.2.5.4 Comparison of availability of paramedical staff in the selected health institutions

The availability of paramedical staff when compared with both the IPHS norms 2012 and State sanctioned strength as of March 2023 is shown in **Chart 2.12**.

Chart 2.12: Paramedical staff against IPHS norms 2012 and State sanctioned strength as of March 2023



From **Chart 2.12,** it can be seen that:

- In selected CHs, the lowest number of paramedical staff (one) was available in CH, Chango and highest (11) in CHs, Baijnath & Jawalamukhi.
- In selected CHCs, the lowest number of paramedical staff (one) was available in CHC, Majheen and highest (nine) in CHC, Dharampur.

Shortage of paramedical staff leads to an increase in the workload of the existing workforce, which affects the health services involving taking of blood samples, administering injections, suturing wounds etc. It also affects radiology/imaging services like x-ray, ultrasound, ECG etc. and laboratory services adversely as discussed below.

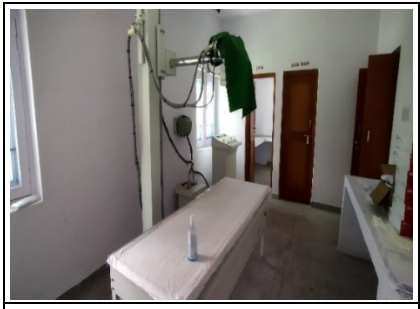
Shortage of radiographers resulted in non-deployment of radiographer in health institutions where x-ray machines were available as seen in one district (Kinnaur) out of the three selected districts. The details are shown in **Table 2.7** and **Pictures 2.1** to **2.3**.

Table 2.7: Showing non-availability of x-ray services due to non-posting of manpower

Name of health Institution	Name of the service	Period of non-availability	
		From	To
CH Chango	X-ray	2016-17	till date of audit (October 2021)
CHC Pooh	X-ray	10/09/2015	10/10/2020
PHC Ribba	X-ray	2016-17	till date of audit (October 2021)
PHC Spillow	X-ray	2016-17	till date of audit (October 2021)

Source: Information provided by the Health Insitutions.

Pictures 2.1 to 2.3: Showing idle machinery in different health institutions

		
Picture 2.1: Idle X-Ray machine in CH Chango	**Picture 2.2: Idle X-Ray machine in PHC Spillow**	**Picture 2.3: Idle X-Ray machine in PHC Ribba**

Due to non-posting of radiographer in the above-mentioned health institutions of Kinnaur district, the patients of these areas requiring x-ray services were compelled to take treatment in DH Kinnaur or other private hospitals at district headquarters and had to travel long distances of about 25-50 km to avail x-ray services.

- In CH Jawalamukhi, no ultrasound tests were conducted from November 2016 to September 2017 due to transfer of the radiologist. No alternate arrangement was made to provide facility to the patients for about 11 months. A radiologist was posted between September 2017 and December 2021. Further, the radiologist from CH Jawalamukhi was deputed to DH Bilaspur from December 2021 onwards, thereby depriving patients of ultrasound facility and compelling them to spend out of their pocket expenses by availing the services at private hospitals.

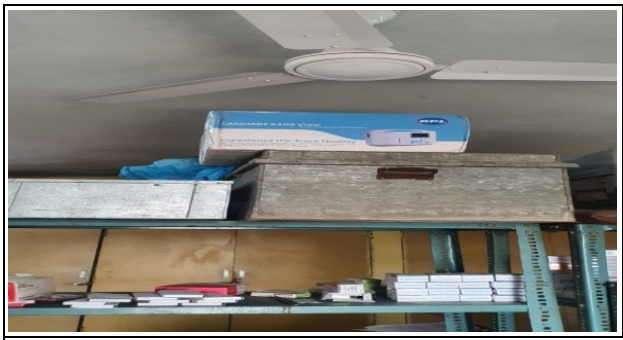
  The BMO Jawalamukhi, in reply, stated that the decision of deputation of the employees is taken at a higher level.

- In CH Shahpur, no radiologist was posted for over four years (April 2016 to July 2020) and ultrasound tests were conducted twice or thrice in a month by deputing a radiologist from other CHs in the district. Hence, ultrasound facilities to the patients were not provided regularly. Further, as per the ultrasound register for the year 2019-21, it was noticed that no ultrasound tests were conducted from March 2020 to August 2020 due to non-functioning of the ultrasound machine.

- In CH Jaisinghpur (under BMO Thural), ultrasound machine was procured and installed in November 2018 but was intermittently put to use during 2018-21 due to the non-availability of a radiologist. The tests were conducted by arranging the radiologist from CH Thural (32 km from Jaisinghpur) on deputation basis for two days in a week. Thus, ultrasound facility was not provided on all days in the CH, in absence of which patients may have to make alternate arrangements for the same.

- In CH Baijnath, no radiologist was posted from April 2016 till the date of audit (May 2022) and ultrasound tests were conducted two to three times in a month for pregnant women by deputing a radiologist from other CHs in the districts. Further, it was noticed from the records that a medical officer having ultrasound diploma was deputed from PHC Kandari every Tuesday for conducting the ultrasound tests for pregnant women but after July 2021, no doctor was deputed for conducting the tests.

- In CH Jawalamukhi, three ECG machines were received from CMO Kangra during February 2018. Two ECG machines out of these were transferred to PHC Kundian and PHC Darkata. CH Jawalamukhi was already having one ECG machine and both the machines were lying unutilised as shown in **Pictures 2.4** and **2.5** since February 2018 due to non-posting of technicians in the hospital:



Pictures 2.4 and 2.5: New and old ECG machine lying idle in CH Jawalamukhi

- In CH Shahpur, the lone radiologist posted was deputed to DH Chamba, vide Himachal Pradesh Government notification issued during February 2022 and thereafter no tests were conducted in the CH.

  In reply, BMO Shahpur stated (March 2022) that orders for posting of the radiologist were issued by the Government so no action had been taken in this regard by their office. It was also stated that matter will be taken up with the Government for alternate arrangements.

- One Lab Assistant was deputed to CH Indora in May 2018 from PHC Darkata under BMO Jawalamukhi. As a result, no lab tests were conducted in PHC Darkata, thereby depriving the patients of the specified health services.

The Department in its reply (May 2022) stated that the matter in this regard would be taken up with the higher authority for posting of a regular radiologist.

The fact remains that timely action in this regard was not taken, as a result of which x-ray and ultrasound facilities etc. to the patients was not regularly provided in the hospitals.

During the Exit Conference, Secretary (Health) to Government of Himachal Pradesh stated that due to shortage of radiographers in tribal areas, despite having x-ray machines, services could not be provided.

2.2.6 Posting of staff without upgrading infrastructure in newly upgraded CHC Bachhwai

The Government of Himachal Pradesh vide notification of August 2019 upgraded PHC, Bachhwai, district Kangra to the level of CHC. Three posts of medical officer (on contract basis) and other supporting staff were sanctioned.

Picture 2.6: Old building of PHC Bachhwai upgraded to CHC

Requirement of infrastructure, human resource, equipment etc. is higher for a CHC as compared to PHC as per the IPHS norms 2012. Though the MOs were posted in the CHC in 2020, however, no additional

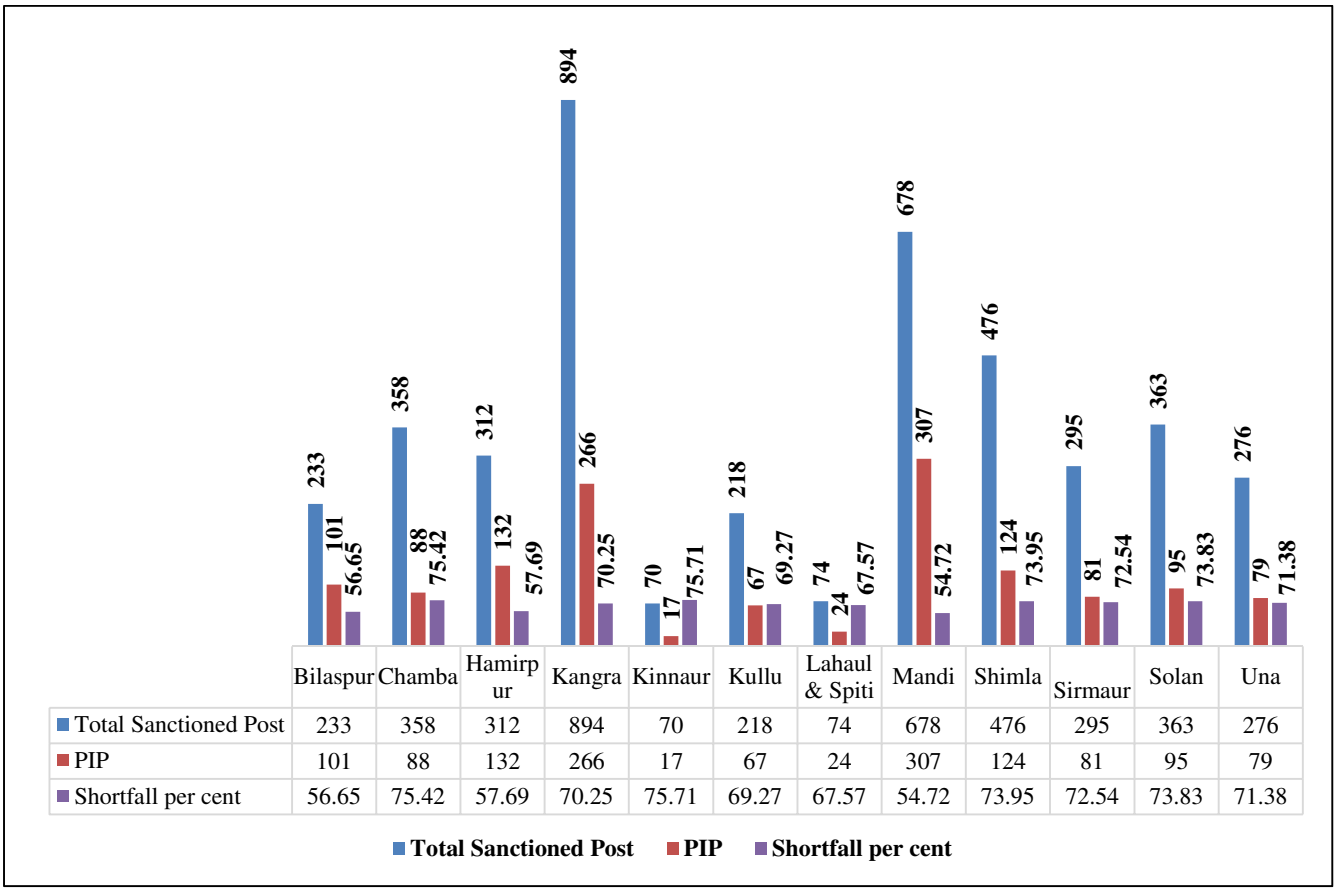
infrastructure like building was created and no additional equipment were purchased even after three and a half years of notification of upgradation of the CHC.

2.2.7 Availability of manpower in HSCs district-wise in the State

As per IPHS norms 2012, each Health Sub Centre (HSC) should have one Auxiliary Nurse and Mid-wife (ANM)/ Health Worker (Female) and one Health Worker (Male).

As per information provided by the DHS regarding the deployment of MHW/FHW in the HSCs, it was noticed that against the sanctioned strength of 4,247 male and female health workers, 1,381 male and female workers were in position as of March 2023. Thus, there was shortage of manpower to the extent of 67 *per cent* for the State as a whole. District-wise position of shortage is shown in **Chart 2.13**.

Chart 2.13: Male & Female Health Workers shortfall

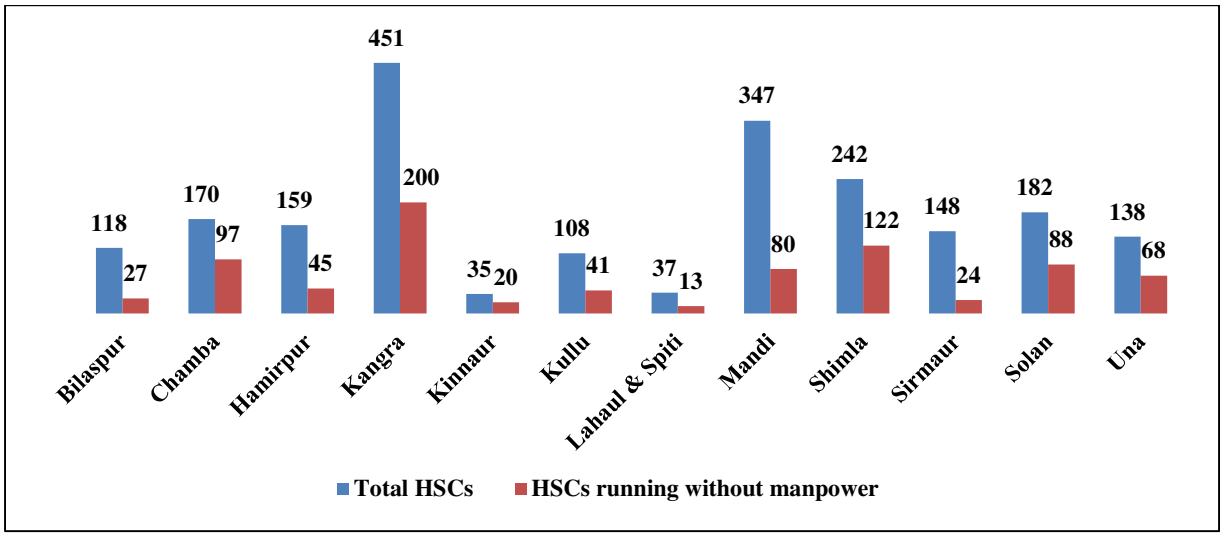


	Bilaspur	Chamba	Hamirpur	Kangra	Kinnaur	Kullu	Lahaul & Spiti	Mandi	Shimla	Sirmaur	Solan	Una
Total Sanctioned Post	233	358	312	894	70	218	74	678	476	295	363	276
PIP	101	88	132	266	17	67	24	307	124	81	95	79
Shortfall per cent	56.65	75.42	57.69	70.25	75.71	69.27	67.57	54.72	73.95	72.54	73.83	71.38

Total Sanctioned Post **PIP** **Shortfall per cent**

It was also noticed that 825 (39 *per cent*) HSCs (out of 2,135) in the State were functioning without any health workers as of March 2023. Number of HSCs, district-wise, running without staff is shown in **Chart 2.14**.

Chart 2.14: HSCs running without manpower



From **Chart 2.14**, it can be seen that Kangra and Lahaul & Spiti districts had the highest (200) and lowest number (13) of HSCs respectively, running without male and female health workers.

In the selected districts, it was noticed that 46.10 *per cent* (Kinnaur- 57 *per cent*, Solan- 48 *per cent* and Kangra- 44 *per cent*) i.e., 308 out of 668 HSCs were running without any health workers.

In reply, CMO Solan stated that health workers were deputed from other health institutions on immunisation day and CMO Kangra stated that they are deputed once in a month for immunisation in these HSCs.

Health Sub Centres are assigned tasks relating to interpersonal communication to bring about behavioural change and provide services in relation to maternal and child health, family welfare, nutrition, immunisation, diarrhoea control and control of communicable diseases programmes. Thus, due non-availability of health workers in HSCs, the Health Department failed to provide complete healthcare to the inhabitants of the rural areas.

2.2.8 Unauthorised/ Irregular withdrawal of pay and allowances

Government of Himachal Pradesh issued instructions in July 2000 that salary of a Government servant should be drawn from the place/station where he/she is working. Withdrawal of salary from a place other than the actual place of posting/working was strictly prohibited.

In contravention of the instructions of Government, pay and allowances of 47 employees of different categories[9] were drawn between June 2006 and June 2022 by nine test-checked units[10] from a place other than actual place of working, due to which health services in some of the health institutions were adversely affected. A few instances are detailed below:

[9] Medical Specialists (eight), Medical Officer (six), Paramedical (25), Ministerial staff (six) Chest and TB (one) and ENT (one).

[10] DH Kangra, CMO Kangra, State Training Institute Parimahal Shimla, RPGMC Kangra, IGMC Shimla, KNH Shimla, BMO Jawalamukhi, CHC Dharampur and BMO Thural.

- In RPGMC Kangra, the Department of Nephrology was non-functional as one Associate Professor of Nephrology was deputed to IGMC Shimla from February 2017 to November 2020 and thereafter relieved to AIIMS, Bilaspur, and his/her salary was being drawn from the establishment of RPGMC Kangra from February 2017 to November 2020.
- In Kamla Nehru State Hospital (KNSH) Shimla, the lone gynaecologist posted was deputed to DH Mandi, during May 2019 and to compensate for the deficit, specialists were being deployed from IGMC. There was increase in neonatal deaths from 60 (2018-19) to 120, 97 and 111 during 2019-22. Increase in maternal deaths were also noticed from 2018-19 (seven cases) to nine, eight and 13 during 2019-22. Absence of a regular gynaecologist as a primary reason for the above cannot be ruled out.
- In CH Jawalamukhi, the lone radiologist posted was deputed to DH Bilaspur during December 2021 and the only dental doctor posted in CHC Majheen was deputed to DH Kangra during September 2020.
- In CHC Dharampur, one ENT specialist was deputed from CH Arki during August 2021 where there was no basic medical equipment related to ENT treatment, thereby compelling the specialists to treat normal patients. Another Chest and TB specialist was deputed from CH Arki during August 2021, although a specialised TB Hospital exists within the same campus.

The Department in its reply (February 2022) stated that the above specialists have been posted as per the orders of the higher authorities and their services are being utilised for treating general OPD patients.

The reply of the Department was not acceptable as the officials should be posted in the place where he/she was drawing pay. Not doing so deprives the patients of specialist services.

2.3 Training of health professionals

The quality and capacity of health workers at public facilities should be enhanced through continuous professional development and refresher courses and in-service trainings after a thorough training needs assessment.

2.3.1 Training by three institutes - SIHFW Shimla, RHFWTC Kangra and STDC Solan

In the selected districts, there are three training institutes namely State Institute of Health and Family Welfare (SIHFW), Shimla; Regional Health & Family Welfare Training Centre (RHFWTC), Kangra and State TB Training and Demonstration Centre (STDC), Solan[11] for providing training to doctors, nurses and paramedic staff.

2.3.1.1 Availability of manpower in the training institutes

Human resource is an asset to an organisation that contributes to the greater part of an organisation's success. Trained faculty are essential for the development of trainees' knowledge and translating the learnings into practice.

[11] Training centre attached with TB Sanatorium, Dharampur, Solan

Audit observed that:

- In RHFWTC Kangra, against the sanctioned strength of six training faculty, only three were deployed as of March 2022.
- In SIHFW Shimla, several important posts like epidemiologist (not available during 2016-21), Communications Officer, Health Education Instructor, Sr. Health Instructors, and Lab technician were lying vacant during 2016-22.
- In STDC Solan, there was no faculty sanctioned for the centre itself. However, faculty members were posted in Intermediary Reference Laboratory (IRL), Dharampur at TB Sanatorium, Dharampur. Against the sanctioned strength of eight members as per SDTC norms, only three staff were posted at IRL as of March 2022. There was no Sr. Lab technician (against sanctioned strength of two) and shortfall of three RNTCP trained lab technicians (against sanctioned strength of five) was noticed.

2.3.1.2 Trainings imparted by the three institutes

The year-wise trainings provided by the above three institutes are detailed in **Table 2.8 A**.

Table 2.8 A: Target and achievement of trainings organised for health professionals

Year	Number of trainings provided to health professionals								
	SIHFW, Shimla			RHFWTC, Kangra			STDC, Solan		
	Target	Achieve-ment	Shortfall (in *per cent*)	Target	Achieve-ment	Shortfall (in *per cent*)	Target	Achieve-ment	Shortfall (in *per cent*)
2016-17	135	129	4	21	11	48	Not defined	10	NA
2017-18	158	144	9	29	39	None	-do-	4	NA
2018-19	83	71	14	39	50	--do--	-do-	5	NA
2019-20	141	127	10	75	53	29	-do-	10	NA
2020-21	103	84	18	38	5	87	-do-	9	NA
2021-22	79	66	16	26	37	None	-do-	8	NA

Source: Information provided by the institutions. NA- Not applicable.

Details of health professionals covered in the training provided by the three institutes during the period 2016-21 is given in **Table 2.8 B**.

Table 2.8 B: Number of health professionals who were imparted training during 2016-21

Year	SIHFW, Shimla						RHFWTC, Kangra					STDC, Solan
	Doctors	Nurse	Paramedical staff	HW	ASHA	Others	Doctors	Paramedical staff	HW	ASHA	Others	Paramedical staff
2016-17	523	430	850	352	298	1102	101	89	56	0	61	203
2017-18	283	134	NA	236	183	775	96	538	303	0	148	78
2018-19	270	279	157	221	141	981	183	393	419	119	189	148
2019-20	544	320	230	187	482	764	129	334	339	704	55	357
2020-21	263	174	198	312	147	336	17	21	3	69	5	106

Source: Information provided by the institutions.

It is evident from the **Table 2.8 A** and **B** that:

- In SIHFW Shimla, there was shortfall in providing number of trainings against the targets fixed during 2016-22, ranging between four to 18 *per cent*.

- In RHFWTC Kangra, there was shortfall during 2016-17 and 2019-21 ranging between 29 to 87 *per cent* while number of trainings organised in three years (2017-19 and 2021-22) exceeded the targets.
- In STDC, Solan, no target was specified for number of trainings to be conducted. However, all participants who were to be imparted trainings did not attend the training due to lack of intimation or non-relieving by the parent offices.

SIHFW Shimla in its reply (May 2022) stated that no TA/DA was provided to the participants in the State norms for training and due to shortage of staff in health institutions, the participants did not come for training.

STDC Solan Stated that (February 2022) that participants either not relived by their officers due to shortage of staff or not being informed timely.

2.3.2 Training through NHM

NHM framework stipulates that the implementation teams, particularly at district and State level, require development of specific skills.

Details of training provided to medical and paramedical staff during 2016-22 are shown in **Table 2.9**:

Table 2.9: Training provided to medical and paramedical staff

Year	Target of persons	Achievements	Shortfall (*per cent*)
2016-17	703	465	238 (33.85)
2017-18	2,040	1,781	259 (12.70)
2018-19	2,167	1,118	1,049 (48.41)
2019-20	4,963	2,589	2,374 (47.83)
2020-21	1,337	986	351 (26.25)
2021-22	2,785	1,033	1,752 (62.91)
Total	**13,995**	**7,972**	**6,023 (43.04)**

Source: Information provided by the Department.

Audit noticed that the State targeted 13,995 personnel under various programmes for training during 2016-22, against which only 7,972 personnel were trained, resulting in shortfall of training of 6,023 (43 *per cent*) personnel. The shortfall ranged between 13 and 63 *per cent* during 2016-22. Thus, the objective of capacity building in increasing the skill and efficiency among health personnel under NHM remained underachieved.

In reply (January 2023), Deputy Mission Director, NHM stated that multiple trainings were being conducted at district and State level and the participants were the same, hence there was shortfall of nominations for training. Most of the slots in the training centre were not available. The reply was not acceptable as this issue should have been considered at the time of fixing of the targets.

- In RHFWTC Kangra, ₹ 10.04 lakh was received from the DHS during March 2013 for conducting training for the health functionaries. Out of the amount of ₹ 10.04 lakh, ₹ 2.69 lakh was still lying unutilised in the savings bank account due to short conducting of training.

In reply, Principal, RHFWTC Kangra stated that due to Covid, the trainings could not be conducted. The reply was not acceptable as Covid was from March 2020 but the funds were received during March 2013.

- During the year 2017-18, funds of ₹ 75.06 lakh were received by the Principal, RHFWTC Kangra from Mission Director, NHM, out of which ₹ 31.08 lakh was received during March 2018. This shows that 41 *per cent* funds were released by NHM during March 2018 and funds received during March 2018 remained unspent due to delay in release of funds.
- Out of total availability of ₹ 113.52 lakh during 2020-21, an amount of ₹ 61.84 lakh was surrendered to the Mission Director, NHM Shimla and unspent balance was ₹ 26.84 lakh. Thus, 54 *per cent* funds were not utilised by RHFWTC, Kangra.

2.4 Seats in Medical Colleges and Nursing Colleges in the State

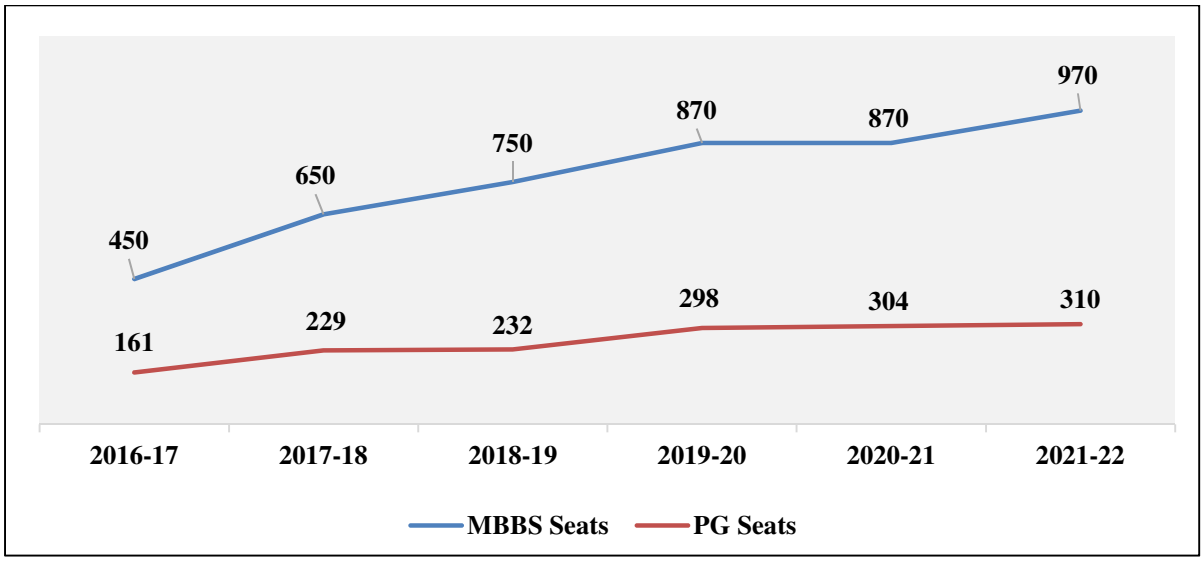
The position of availability of seats in medical colleges and nursing colleges for undergraduate and postgraduate courses in the State is detailed below.

2.4.1 Seats in Medical Colleges

There were 970 MBBS seats (100 seats in AIIMS Bilaspur, 120 each in six Government colleges and 150 in a private college) and 310 Postgraduate (PG) seats (218 in three government colleges and 92 in a private college) as on 31 March 2022 in the State.

The details of MBBS and PG seats during 2016-22 are shown in **Chart 2.15**.

Chart 2.15: MBBS and PG seats during 2016-22



Source: Information provided by the Directorate.

2.4.2 Seats in Nursing Colleges

A total of 2,376 nursing seats are available in the State. Out of this, there are 2,195 seats for Undergraduate course (150 seats in two Government nursing colleges and 2,045 seats in private nursing colleges) and 181 seats for Postgraduate course (25 seats in one Government nursing college and 156 in four private nursing colleges).

2.5 Recruitment of manpower

A total of 5,448 employees were recruited during the period April 2016 to March 2022. Details of year-wise recruitment is given in **Table 2.10**:

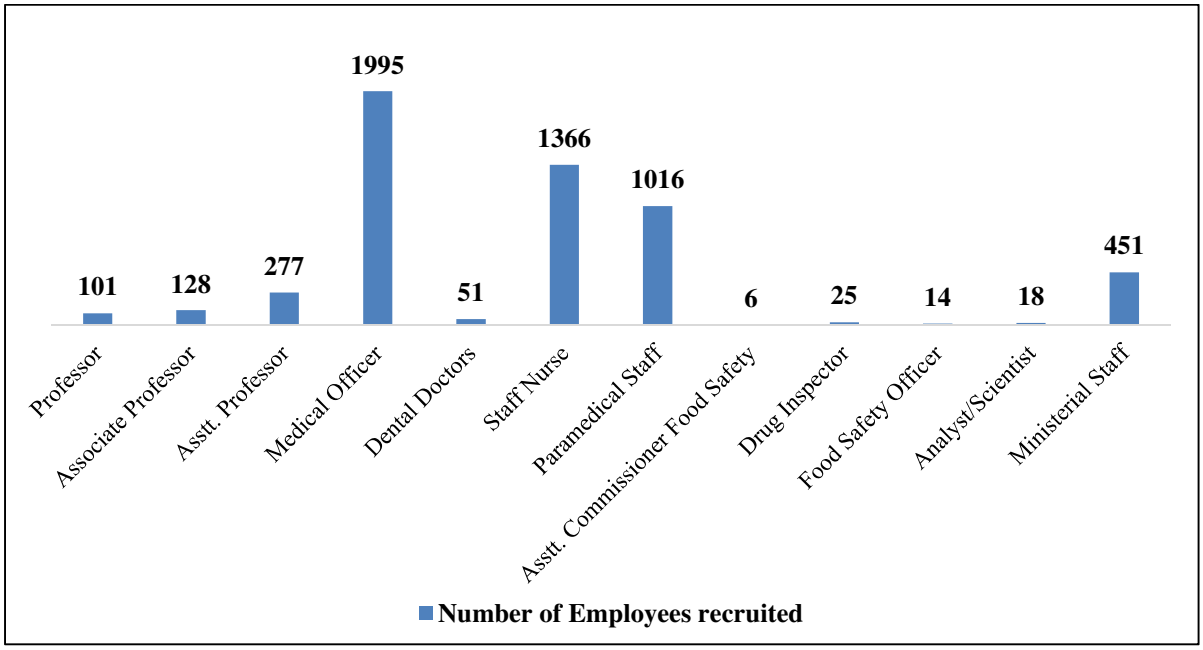
Table 2.10: Manpower recruited during the period 2016-22

Financial year	Number of employees recruited
2016-17	830
2017-18	770
2018-19	1,257
2019-20	855
2020-21	987
2021-22	749
Total	**5,448**

Source: Information provided by the Directorate.

Break-up of recruitment undertaken for different cadres is given in the **Chart 2.16**.

Chart 2.16: Category-wise number of employees recruited



Source: Information from the four Directorates (DH&FW, DDH, DHS&R, DMER).

From **Table 2.10**, it can be seen that 5,448 employees were recruited, which constitutes almost 34 *per cent* of the present available manpower. This implies that 34 *per cent* of the current workforce was recruited during the last six years. Further, sanctioned strength has increased by 23.44 *per cent* during 2022-23 as compared to the sanctioned strength of 2016-17. The overall shortage of staff was 38.91 *per cent* during 2016-17, which increased to 41.87 *per cent* during 2022-23. This shows that proportionate recruitment of staff was not done by the Government. The year-wise recruitment plans/targets, though called for in audit, were not produced.

2.6 Conclusion

Human resources, which are an essential resource for providing smooth and uninterrupted health management services witnessed persistent shortages in all important cadres, including in the selected health institutions. The Government has not created sanctioned posts in the health sector considering IPHS norms as the benchmark. Further, there is shortage in available

manpower against the sanctioned strength as well, adversely affecting health services. This shortage is quite high in several key posts such as doctors, staff nurses, etc. who play a very important role in delivering comprehensive healthcare to the beneficiaries. Moreover, available manpower has not been distributed uniformly across the districts and this trend has been witnessed across all the departments and in most of the crucial posts as well. Further, the pace of recruitment is not at par with the consistent vacancy persisting in different cadres.

- There was an overall shortfall of 41.47 *per cent* in human resources deployed at health institutions across all categories in the State as a whole as of March 2023. Acute shortages especially in the category of specialist doctors, nursing services, technicians etc. were also noticed in the selected DHs, CHs and CHCs.
- Against the State sanctioned strength, shortage was noticed in availability of medical officers in the selected districts.
- There was shortage of doctors in most of the departments with reference to sanctioned strength by the State government in both the selected government medical colleges.

2.7 Recommendations

Government should:

- *Consider revising the sanctioned strength of Health Departments at par with the IPHS norms.*
- *Focus on expediting the recruitment process in order to fill up vacancies in the sector.*
- *Allocate human resources in the health institutions throughout the State in a uniform manner. In the short term, the existing staff should be rationalised across districts and health institutions. While rationalising, it should be ensured that the postings are done in such a way that complementary healthcare professionals i.e., doctors, nurses, paramedics, technicians and other support staff are posted in each health institution. Availability of infrastructure and other crucial components should be considered during such rationalisation.*
- *Incentivise doctors to serve in remote and far-flung areas of the State.*
- *Strengthen Training Needs Assessment for proper utilisation of training slots.*
- *Plan through State policy for assessment of medical personnel, sanction of posts, recruitment and deployment of doctors, nurses and paramedical staff.*

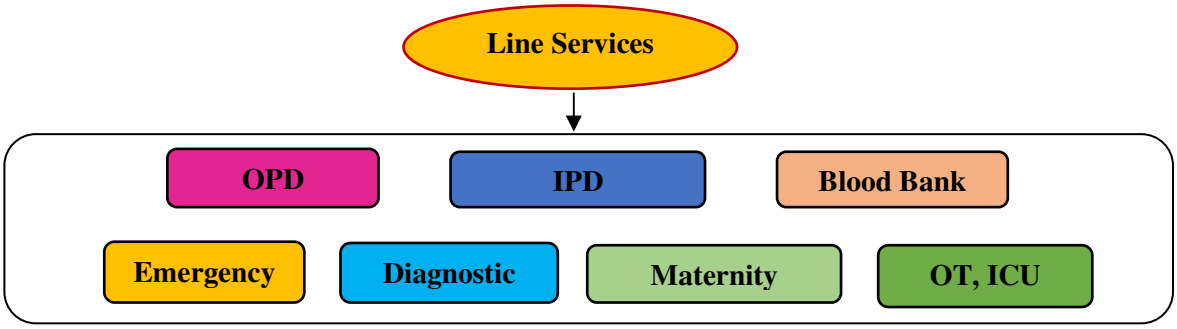
CHAPTER-III
HEALTHCARE SERVICES

Chapter III: Healthcare services

High-quality healthcare services involve the right care, at the right time, responding to the users' needs and preferences, while minimising harm and wastage of resources. Quality healthcare increases the likelihood of desired health outcomes.

Audit test-checked the records of selected HIs on delivery of timely and quality healthcare services through line services like Out-Patient Department (OPD), In-Patient Department (IPD), Intensive Care Unit (ICU), Operation Theatre (OT), Emergency, Maternity, Blood Bank and Diagnostic services. Details of line services are shown in **Chart 3.1**.

Chart 3.1: Services in Line service



3.1 Line services

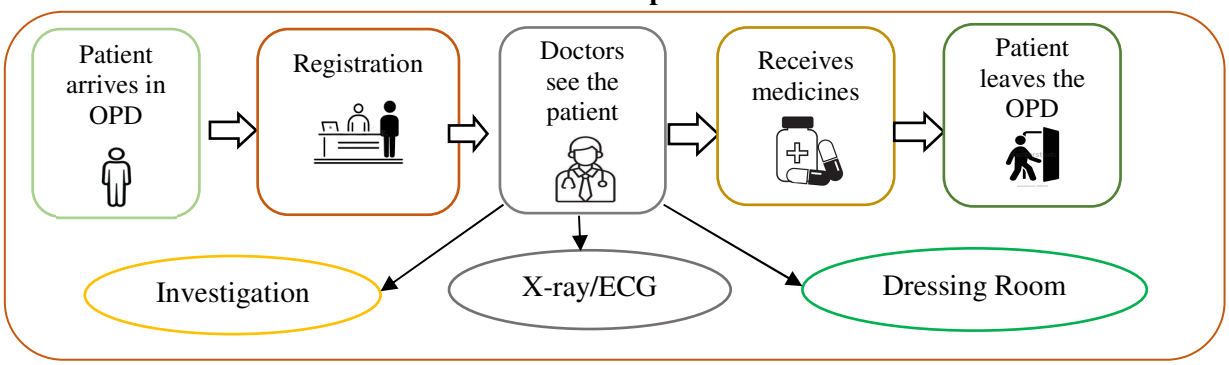
3.1.1 Out-Patient Department (OPD) Services

3.1.1.1 Registration of patients in OPD (Tertiary level)

Registration counter is the first point of contact with the hospital for a patient and is an important component of hospital experience for patients and their attendants.

As specific norms for OPD registration were not mentioned in National Medical Commission (NMC) norms, it was checked on the basis of IPHS norms 2012 for DHs. As per IPHS norms 2012, it is desirable that the registration process is computerised in DHs and able to collect patient information such as age, sex, address, ailment and previous patient information in case of old cases in a quick manner so that unnecessary delay is avoided. Depending on the status of illness of the patient, the doctor also decides whether the patient requires to be admitted as an in-patient. The detailed process flow of OPD is shown in **Chart 3.2**:

Chart 3.2: Flow of patient in OPD



During joint physical inspection of OPD registration area conducted by Audit with hospital authorities, analysis was made against the checklist of NHM Assessor Guidebook 2013 for

DHs as norms for OPD registration area in MCHs was not mentioned in NMC. It was noticed that:

- In RPGMC Kangra, to manage the OPD load, six registration counters (two for female, two for male and one each for senior citizen and divyang patients) were available. However, the OPD registration area was seen to be overcrowded as shown in **Picture 3.1**.
- In IGMC Shimla, to cater to the OPD load, only four registration counters (one for female, two for male and one for senior and *divyang* patients) were available. OPD registration area was found overcrowded with inadequate seating chairs as shown in **Picture 3.2**. Further, the patients along with their attendants were found sitting on ramps and floors as shown in **Picture 3.3**.
- In both the MCHs, there was no provision for online registration, which could have reduced the overcrowding in the registration area. Both the MCHs, being tertiary level institutions and offering specialist care, the provision of online registration is absolutely necessary.

Picture 3.1 and **3.2: Patients' rush at OPD registration counter in RPGMC & IGMC respectively.**

Picture 3.3: Attendants sitting on ramps in IGMC

3.1.1.2 Registration of patients in OPD (Secondary and Primary level)

As per IPHS norms 2012, it is desirable that the registration process is computerised in DHs. In CHs and CHCs, registration counters should be available. In case of PHC, specific norm for counter was not available.

In the three selected districts, Audit noticed that only DHs had computerised registration system while in CHs/CHCs/PHCs, manual registration was followed. In both the registration systems, only details like name of the patient, age and sex were entered. Details of ailment and whether it was a referral case, etc were not maintained. Since registration data did not contain complete information of the patients, the data did not enable any patient analysis.

In the exit conference (January 2023), the Secretary (Health) stated that for online registration in 56 HIs, letter of award has been issued and it was under process to alleviate the crowded registration process.

3.1.1.3 Wait time for registration at registration counters (at all levels)

The 'wait time' for registration at the counters as per the results of survey of 359 patients conducted by Audit in 35 selected HIs at Primary, Secondary and Tertiary levels is tabulated in **Table 3.1**.

Table 3.1: Waiting time for registration

Name of District	Name of Hospital	No. of counters	No. of patients surveyed	Average wait time in minutes (rounded off)
	IGMC, Shimla	4	15	22
	RPGMC, Kangra	6	15	15
Kinnaur	DH Kinnaur	2	16	12
	CH, Chango	1	9	12
	CHC, Pooh & Sangla	1 in each	17	6
	4 PHC	1 in each PHC	40	6
Solan	DH Solan	3	15	16
	CH Kandaghat	1	11	3
	CHC Syri & Dharampur	1 & 2	20	4
	4 PHC	1 in each PHC	26	2
Kangra	DH Kangra	2	15	9
	CH Thural	1	10	5
	CH Shahpur	1	10	10
	CH Jawalamukhi	1	11	5
	CH Baijnath	4	10	2
	CHC Majheen, Bir and Bachhwai	1 in each CHC	30	3
	9 PHC	1 in each PHC	89	4
Total			**359**	

From **Table 3.1**, average waiting time for registration ranged between two minutes to 22 minutes. In DH Solan, the registration counters were overcrowded as shown in **Picture 3.4**. Though it has computerised registration system, it was evident from the overcrowding that the OPD was not equipped to handle the patient load and hence needed to increase the number of counters.

Picture 3.4 : Crowd at OPD registration line in DH Solan

3.1.1.4 Wait time between registration and consultation with the doctor (in selected HIs)

The 'wait time between registration and consultation with doctor (registration and drug time for Kinnaur District) ' as per the results of survey of 359 patients conducted by Audit in 35 selected HIs at Primary, Secondary and Tertiary levels is tabulated in **Tables 3.2 (A)** and **3.2 (B)**.

Table 3.2 (A): Wait time between registration and consultation with the doctor

Name of District	Name of Hospital	No. of patients surveyed	Average wait time in minutes
	IGMC, Shimla	15	43
	RPGMC, Kangra	15	28
Solan	DH Solan	15	22
	CH Kandaghat	11	7
	CHC Syri & CHC Dharampur	20	7
	4 PHC	26	3
Kangra	DH Kangra	15	10
	CH Thural	10	5
	CH Shahpur	10	10
	CH Jawalamukhi	11	10
	CH Baijnath	10	2.5
	CHC Majheen, Bir and Bachhwai	30	4
	9 PHC	89	6
Total		**277**	

From **Table 3.2 (A)**, it can be seen that average waiting time from registration to consultation ranged between 2.5 minutes to 43 minutes.

For Kinnaur District where the waiting time between registration and receipt of drugs was considered, the average waiting time was 14 to 102 minutes as shown in **Table 3.2 (B)**:

Table 3.2 (B): Wait time between registration and drug time

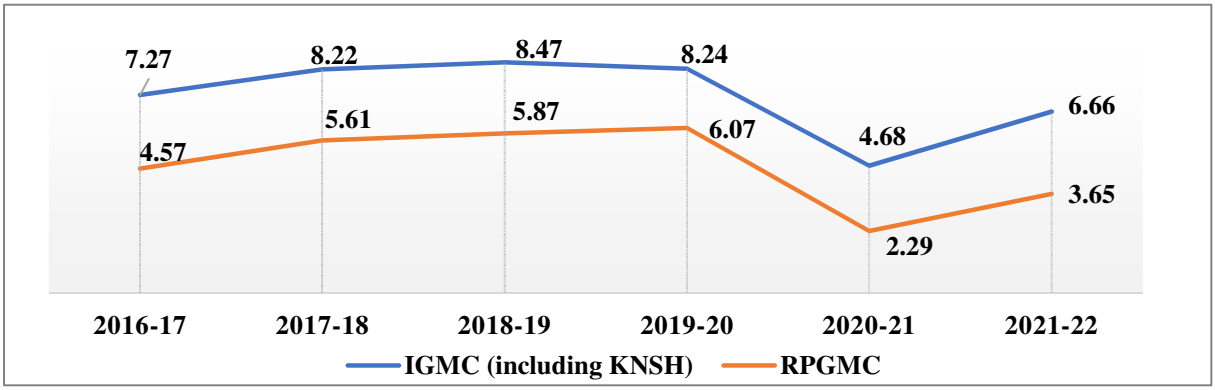
Name of District	Name of Hospital	No. of patients surveyed	Average wait time in minutes
Kinnaur	DH Kinnaur	16	102
	CH, Chango	9	38
	CHC Pooh & CHC Sangla	17	29
	4 PHC	40	14
Total		**82**	

3.1.1.5 Patient load in OPD (Tertiary level)

As per NMC norms, OPD areas of MCHs should have adequate reception and patient waiting halls, consultation rooms, examination rooms and other ancillary facilities commensurate with the clinical speciality departments.

Scrutiny of records revealed that there was substantial patient load in IGMC (including KNSH), Shimla and RPGMC, Kangra, the details of which are given in **Chart 3.3**.

Chart 3.3: Year-wise OPD patients in IGMC (including KNSH) and RPGMC during 2016-22 (in lakhs)



Source: Information provided by the HIs

It can be seen from **Chart 3.3** that the number of OPD patients in both the MCHs increased from 2016-17 to 2019-20 which could be due to non-availability of proper facilities and specialists in lower level HIs which is discussed in Chapter II (Human resources).

During the Covid pandemic period i.e. 2020-21 the number of OPD patients decreased in both the MCHs and the patient load again increased in 2021-22.

In the exit conference (January 2023), the Secretary (Health) stated that increase in patient load was due to the fact that patients directly approached the DHs or MCHs.

3.1.1.6 Patient load in OPD and average consultation time (Secondary level)

As per IPHS norms 2012 for DHs, workload at OPD shall be studied and measures shall be taken to reduce the waiting time for registration, consultation, diagnostics and pharmacy. Specific norms for consultation time were not mentioned in IPHS norms. The number of out-patients attended to in the selected DHs is shown in **Table 3.3**:

Table 3.3: Number of patients attended in OPD in selected DHs

Name of hospital	Year	OPD patients during the year	No. of doctors/ consultants	Average consultation time (min)*
DH Kinnaur	2016-17	67,818	6	9.55
	2017-18	66,103	5	8.17
	2018-19	66,863	6	9.69
	2019-20	62,109	6	10.43
	2020-21	16,819	6	38.53
	2021-22	72,413	10	14.91
DH Solan	2016-17	3,22,476	13	4.35
	2017-18	3,09,902	15	5.23
	2018-19	3,39,919	16	5.08
	2019-20	3,00,820	17	6.10
	2020-21	2,36,769	20	9.12
	2021-22	2,57,306	31	13.01
DH Kangra	2016-17	2,42,775	20	8.90
	2017-18	2,28,972	18	8.49
	2018-19	2,49,585	25	10.82
	2019-20	2,59,732	28	11.64
	2020-21	1,31,399	30	24.66
	2021-22	86,969	26	32.29

** Average consultation time= Working minutes (taken as 360 minutes (6 hours))/ (No. of patients/ (300 days* no. of doctors))*

Audit observed that the consultation time in the selected DHs ranged between four minutes to 39 minutes.

Further, in case of other selected HIs (details as per **Appendix 1**) it was observed that in six selected CHs, the consultation time ranged between two minutes and 32 minutes during 2016-22.

3.1.1.7 Availability of basic amenities in OPD (Tertiary level)

As specific norms for basic amenities in OPD were not mentioned in NMC norms, basic amenities in OPD registration area were checked on the basis of IPHS norms 2012 for DHs.

Status of availability of basic amenities in the selected MCHs observed during joint physical inspection is shown in **Table 3.4**.

Table 3.4: Availability of basic amenities in the selected MCHs (as on date of audit)

Name of the amenities/facilities available	IGMC, Shimla	RPGMC, Kangra
Availability of wheelchair or stretcher for easy access to the OPD	Yes	Yes
Seating arrangement	Inadequate	Inadequate
Potable drinking water	Not in registration area	Yes
Availability of ramps with railing	Yes	Yes
Availability of disabled friendly toilet	No	No

Source: Information provided by the Health Insitutions.

Survey of 30 patients (15 in each MCHs) was conducted by Audit and following were the responses of the patients:

- In both the MCHs, 28 out of 30 surveyed patients expressed dissatisfaction about sufficiency of registration counters.
- In both the MCHs, 29 out of 30 patients stated that there was lack of proper facilities for divyang patients.

RPGMC Kangra and IGMC Shimla, being tertiary level institutions and facing increasing OPD patient load, it is desirable that their facilities be upgraded to provide adequate and timely services to the OPD patients.

3.1.1.8 Availability of basic amenities in OPD (Secondary level)

IPHS norms 2012 envisaged that there should be some basic amenities for patients in OPD like potable drinking water, functional and clean toilets with running water, fans/coolers, seating arrangement as per patient load, ramps and wheelchairs in DHs, CHs and CHCs.

Basic amenities available in the selected HIs (DHs, CHs and CHCs) are shown in **Tables 3.5, 3.6** and **3.7** respectively.

Table 3.5: Availability of basic amenities in selected DHs (as on date of audit)

Items	DH Kinnaur	DH Solan	DH Kangra
Water Purifier	2	1	1
Fan	Not required	3	1
Toilet (Female)	2	1	8
Toilet (Male)	6	1	8
Chair/ Bench	73	5	130
Availability of ramp	Yes	Yes	Yes
Availability of wheelchairs	Yes	Yes	Yes

Source: Information provided by the Health Institutions.

As can be seen from **Table 3.5**, adequate basic amenities were available in DH Kinnaur and DH Kangra but in DH Solan, male and female patients' toilets were available with common entrance and available water cooler was not functional as shown in **Pictures 3.5** and **3.6** respectively.

Picture 3.5: Toilets with common entrance for male and female in DH Solan

Picture 3.6: Non-functional water cooler in DH Solan

Table 3.6: Availability of basic amenities in selected CHs (as on date of audit)

Items	CH Chango	CH Kandaghat	CH Shahpur	CH Thural	CH Jawalamukhi	CH Baijnath
Water Purifier	0	1	0	1	0	1
Fan	Not required	4	7	5	1	5
Toilet (Female)	1	1	2	2	0	1
Toilet (Male)	1	1	2	2	0	1
Chair	8	15	2	35	5	10
Availability of ramp	No	Yes	Yes	Yes	No	Yes
Availability of wheelchairs	No	Yes	Yes	Yes	Yes	Yes

Source: Information provided by the Health Institutions.

As can be seen from **Table 3.6**, water purifier was not available in CH Chango, Shahpur and Jawalamukhi. In CH Jawalamukhi, male and female toilet facility was also not available. In CH Chango, ramps and wheelchair were not available. In CH Jawalamukhi ramps were not available.

Table 3.7: Availability of basic amenities in selected CHCs (as on date of audit)

Items	Pooh	Sangla	Syri	Dharampur	Majheen	Bir	Bachhwai
Water Purifier	1	3	0	1	1	2	1
Fan	Not required		1	2	2	6	5
Toilet (Female)	1	5	1	1	1	2	1
Toilet (Male)	1	4	1	1	1	2	1
Chair/ Bench	3	8	12	15	6	14	26
Availability of ramp	No	No	Yes	Yes	No	Yes	Yes
Availability of wheelchairs	Yes	Yes	Yes	Yes	Yes	Yes	No

Source: Information provided by the Health Institutions.

As can be seen from **Table 3.7**, in all the seven selected CHCs, all basic amenities were available except in CHC Syri where water purifier was not available, and patients had to make their own arrangement. Ramps were not available in CHCs Pooh, Sangla and Majheen. Wheelchairs were not available in CHC Bachhwai.

3.1.1.9 Availability of OPD services in selected HIs (Tertiary level)

There were 36 departments (June 2022) in RPGMC, Kangra and 25 departments (September 2022) in IGMC, Shimla {including Kamla Nehru State Hospital for Mother and Child (KNSH)}. Out of the above, 18 departments in RPGMC and 25 departments in IGMC (including KNSH) had OPD available as on date of audit.

3.1.1.10 Availability of OPD services (Secondary level and Primary level)

As per IPHS norms 2012, there should be 14[1] OPD services in DHs, 12[2] OPD services in CHs and six[3] OPD services in CHCs. To ascertain the availability of OPD services in selected HIs, audit scrutinised the records related to the availability of specialised doctors and necessary infrastructure.

i. Status of availability/non-availability of OPD services in all DHs as of March 2023 is given in **Table 3.8**:

Table 3.8: Availability of important OPD services in all DHs in the State (as of March 2023)

Name of Service	Bilaspur	Chamba	Kangra	Kinnaur	Kullu	Hamirpur	Lahaul & Spiti	Shimla	Solan	Sirmaur	Una	Mandi
General Medicine	×	✓	×	×	✓	✓	×	✓	✓	✓	✓	✓
General Surgery	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓
Obstetrics & Gynaecology	✓	✓	✓	✓	✓	✓	×	✓	✓	✓	✓	✓
Pediatrics	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓
Ophthalmic	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓
ENT	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓
Skin & VD	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	×
Psychiatry	×	✓	×	×	×	✓	×	×	×	✓	✓	✓
Orthopedics	✓	✓	×	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dental	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Neonatology	×	×	×	×	×	✓	×	×	×	✓	×	×
Social Service	×	✓	×	✓	×	✓	×	×	×	×	✓	×

Source: Information provided by the Health Institutions.
✓- Service available, ×- Service not available

As can be seen from **Table 3.8**:

a. In DH Hamirpur, all the OPD services are available, whereas in DH Lahaul & Spiti only two OPD services were available.

b. In the remaining DHs, six to 12 OPD services were available.

c. Dental OPD is available in all DHs and Neonatology OPD is available only in DH Hamirpur and Sirmaur while OPD for General Medicine was not available in Bilaspur, Kangra, Kinnaur and Lahaul & Spiti.

ii. Status of non-availability of OPD services in selected DHs is detailed in **Table 3.9**.

[1] General, Medical, Surgical, Ophthalmic, ENT, Dental, Obstetrics & Gynaecology, Post-partum unit, Pediatrics, Dermatology, Psychiatry, Neonatology, Orthopedics and Social Service.
[2] General, ENT, Medicine, Eye, Pediatrics, Surgical, Dental, Obstetrics & Gynaecology, Orthopedics, Neonatology, Social Service, General and Post-partum unit.
[3] General Medicine, Pediatrics, Surgical, Dental, Obstetrics & Gynaecology and Family Welfare.

Table 3.9: Period of non-availability of OPD services in selected DHs

DHs (services not available out of 14)	Name of OPD services	Period of non-availability of OPD services	No. of years	Reasons
Kinnaur (12)	ENT	April 2016 to October 2021	5.5	Due to non-posting of specialist.
	General Medicine	April 2016 to March 2019	3	
	Eye	April 2016 to March 2018	2	
	Paediatric	April 2016 to October 2021	5.5	
	Surgical	April 2016 to March 2018	2	
	Obstetrics	April 2016 to March 2018	2	
	Post-partum	April 2016 to March 2018	2	
	Dermatology (Skin)	April 2016 to October 2021	5.5	
	Psychiatry	April 2016 to October 2021	5.5	
	Neonatology	April 2016 to October 2021	5.5	
	Orthopaedic	April 2016 to October 2021	5.5	
	Social service department	April 2016 to October 2021	5.5	
Solan (4)	Eye	January 2016 to July 2016	0.5	
	Post-Partum Unit	April 2016 to December 2021	5.8	
	Psychiatry	January 2016 to June 2019, 19/11/2021 to 07/02/2021 and 16/05/2021 to till December 2021 (Date of reply)	3.5	
	Social service department	April 2016 to December 2021	5.8	
Kangra (4)	Psychiatry	November 2021 to December 2021	2 months	Due to transfer of specialist to Kangra
	Neonatology	April 2016 to December 2021	5.8	No such post in DH Kangra
	Orthopaedic	April 2016 to December 2021	5.8	
	Social service department	April 2016 to December 2021	5.8	

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.9** that in the selected DHs, a number of OPD services ranging between four and 12 out of 14 were not available. In absence of these OPD services at the district level, patients had to visit tertiary HIs leading to increase in OPD patient load and overcrowding as discussed in **Para 3.1.1.5**.

Further, it was observed that:

- In the selected CHs, out of 12 OPD services, one to nine OPD services were available in CHs as per details given in **Appendix 2** as of March 2023.
- In the selected CHCs, none of them had four OPD services namely Medicine, Paediatrics, General Surgery and Obstetrics & Gynaecology. In three[4] out of seven CHCs, dental OPD was not available as per details given in **Appendix 2** as of March 2023.
- In all the selected PHCs, only one Medical officer was available.

In reply, in charge of the HIs (October- December 2021) attributed the non-availability of services to shortage of human resources in the respective HIs.

Due to non-availability of OPD services, patients either had to be referred out of the district or to tertiary/private hospitals, entailing increasing patient load on the tertiary level

[4] CHC Pooh, Majheen and Bachhwai.

institutions. Additional financial burden was borne by the patients on private treatment as commented in **Para 2.2.3.4**.

During the exit conference (January 2023), the Secretary (Health) attributed the gaps in OPD services in DHs and CHs to shortage of specialists.

3.1.1.11 Delay in operationalisation of new OPD block at IGMC, Shimla

For construction of a new OPD block at IGMC Shimla, Administrative Approval (A/A) was accorded during December 2019 for ₹ 103.18 crore. After incurring expenditure of ₹ 90 crore, the work was completed and the new OPD block was inaugurated in January 2022 as shown in **Picture 3.7**. However, audit noticed that the new OPD block had not been put to use (September 2022) as approval from National Green Tribunal was awaited. Further, there was also a land dispute at the site as shown in **Picture-3.8** which delayed the operationalisation of the new OPD block**.**

Picture 3.7: Newly constructed OPD block at IGMC, Shimla.

Picture 3.8: Showing disputed private land within the OPD campus.

During the exit conference the Department stated that the matter was sub-judice and appropriate action will be taken after decision of the court. The reply is not tenable as the Department should have ensured availability of land and all clearances before taking up execution of the work.

Assistant Controller (F& A) IGMC Shimla stated (January 2024) that the new OPD block has been made functional w.e.f March 2023 after a delay of 13 months.

3.1.1.12 Non-operationalisation of geriatric OPD clinic in RPGMC, Kangra

The Government released ₹ 5.86 crore between November 2016 and February 2017 for setting up a geriatric OPD clinic in RPGMC Kangra. However, due to indecision[5] by the Department and land dispute at the site, the work could not be started as of June 2022 as confirmed by the Department.

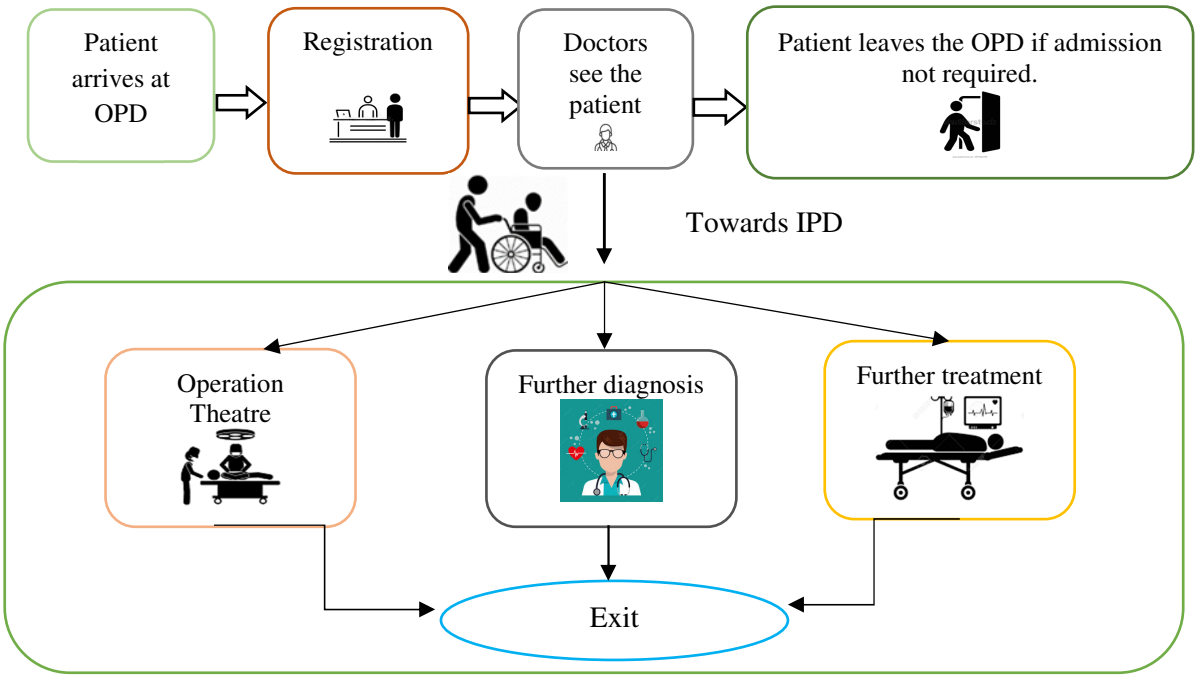
Thus, due to non-ensuring of availability of land, senior citizens were deprived of OPD services in RPGMC Kangra.

[5] The initial approval (November 2016) was accorded for construction of a geriatric centre. During a meeting in June 2017, it was suggested to club the geriatric centre, skill centre and bone bank together due to space constraints. Finally, work for the geriatric centre was proposed to be initiated (October 2020) which could not be started due to a court case.

3.1.2 In-patient Department (IPD) Services

IPD refers to the areas of the hospital, where patients are accommodated after being admitted, based on doctor's/specialist's recommendation, from OPD, Emergency Services and Ambulatory Care. In-patients require a higher level of care through nursing services, availability of drugs/ diagnostic facilities, observation by doctors etc. **Chart 3.4** shows the procedure for patient flow in the IPD.

Chart 3.4: Patient flow in the IPD



3.1.2.1 Availability of IPD Services (Tertiary Level)

As per NMC norms (October 2020), MCHs shall have 24 departments. It was noticed that except Physical Medicine and Rehabilitation in RPGMC Kangra and Dentistry, Physical Medicine and Rehabilitation in IGMC Shimla all the other required departments were available in both the selected MCHs.

Joint physical verification of a few of the IPD wards was conducted and following points were noticed:

- In IGMC Shimla, the number of patients were more than the functional beds in Urology and Cardiothoracic Vascular Surgical (CTVS) wards which indicated that number of beds available were not adequate as discussed in **Para 5.2.1**. Male and female patients were kept in the same ward as separate wards were not available, thereby compromising the privacy of the patients.
- In RPGMC, Kangra, double occupancy was seen on 17 beds in Medicine male ward, showing high patient occupancy rate.
- Proper ventilation and illumination were not available in Children's ward and Medicine female ward of IGMC Shimla. In RPGMC, Kangra, proper ventilation was not available

as installed A.C. units in Male/ Female surgery, Children's ward, Female orthopaedic, Male medicine ward were insufficient, leading to a suffocating and humid environment.

- In IGMC Shimla, it was seen that beds were placed in corridors leading towards Male Ortho and Female medicine ward, which was causing hindrances for smooth flow of stretchers and staff as shown in **Pictures 3.9** and **3.10**.

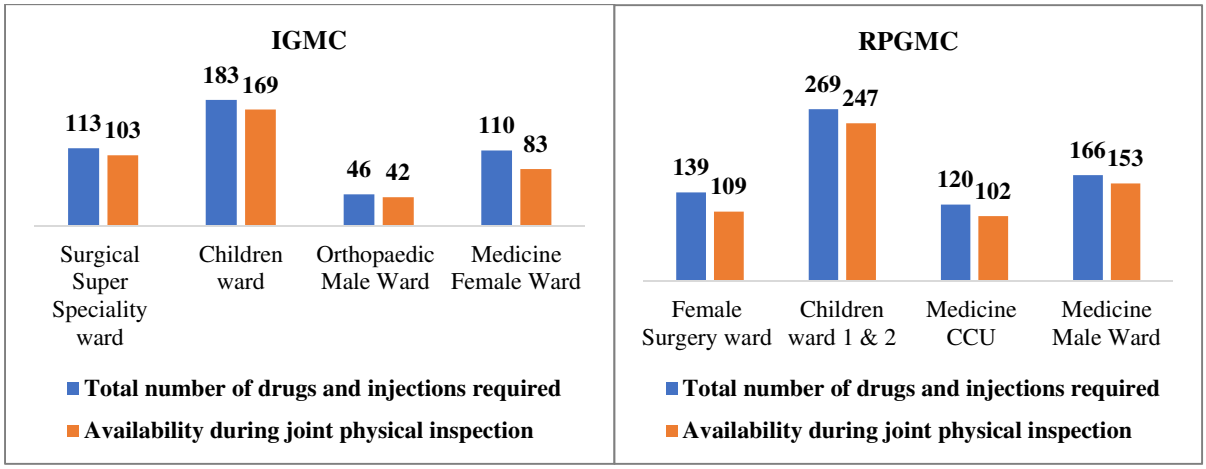
Picture 3.9: Male Ortho ward in IGMC

Picture 3.10: Female Medicine ward in IGMC

3.1.2.2 Availability of essential drugs and injections in IPD wards (Tertiary level)

Basic drugs and injections required in the wards should be kept available to ensure prompt treatment of the patients. The position of availability of basic drugs and injections in the ward as observed during joint physical inspection was as detailed in **Chart 3.5**:

Chart 3.5: Availability of basic drugs and injections



It was observed that though the shortage in availability of drugs and injections in the wards was not significant, however, none of the wards had all drugs and injections available as per requirement.

3.1.2.3 IPD patient load (Tertiary level)

The number of in-patients who were provided medical care and services in the selected MCHs during 2016-2022 are shown in **Table 3.10**.

Table 3.10: Number of in-patients in selected Medical College Hospitals

Year	IPD load in (IGMC+ KNSH)	Increase (+)/ Decrease (-) (*per cent*)	IPD load in RPGMC	Increase (+)/ Decrease (-) (*per cent*)
2016-17	47,804	-	2,21,914	-
2017-18	41,531	(-)13.12	2,47,478	+11.52
2018-19	49,899	+20.15	2,38,443	(-)3.65
2019-20	52,032	+4.27	2,44,796	2.66
2020-21	39,949	(-)23.22	1,58,132	(-)35.40
2021-22	74,541	+86.59	1,85,787	+17.49

Source: Information provided by the HIs

In IGMC Shimla and Kamla Nehru State Hospital (KNSH, Maternity wing), during 2017-18, there was an overall decrease in IPD patients by about 13.12 *per cent*. There was increase in number of in-patients by 20.15 *per cent* and 4.27 *per cent* during 2018-19 and 2019-20 respectively. However, there was decrease in number of in-patients by 23.22 *per cent* during the period 2020-21. Again, in 2021-22, there was increase in the number of in-patients by 86.59 *per cent* in IGMC.

In RPGMC Kangra, percentage increase in number of in-patients during 2017-18, 2019-20 and 2021-22 were 11.52, 2.66 and 17.49 respectively. However, percentage decrease in number of in-patients during 2018-19 and 2020-21 were 3.65 and 35.40 respectively. The substantial number of IPD load in the MCHs was due to non-availability of essential services and manpower at primary and secondary HIs as discussed in succeeding chapters.

3.1.2.4 Availability of IPD services (Secondary level)

As per IPHS norms 2012, in the HIs (DHs, CHs and CHCs), the IPD beds shall be categorised as General Medicine ward, ENT ward, Paediatric ward, General Surgery ward, Ophthalmology ward, Accident & Trauma ward etc.

Status of availability of in-patient services in selected DHs and CHs is detailed in **Table 3.11**.

Table 3.11: Availability of important IPD services in selected DHs and CHs (as of March 2023)

Services	DH Kinnaur	CH Chango	DH Solan	CH Kandaghat	DH Kangra	CH Thural	CH Jawalamukhi	CH Shahpur	CH Baijnath
General Medicine	×	×	✓	×	×	✓	✓	×	✓
ENT	×	×	✓	×	✓	×	×	×	✓
General surgery	✓	×	✓	×	✓	×	×	✓	✓
Ophthalmology	×	×	✓	×	✓	×	×	✓	✓
Orthopaedics	✓	×	✓	×	×	×	×	×	×
Accident & trauma	×	×	✓	×	✓	×	×	×	×
Paediatrics	×	×	✓	×	✓	×	×	✓	✓
Obstetrics & Gynaecology	✓	×	✓	×	✓	✓	✓	✓	✓
Burn ward	×	NA*	✓	NA*	✓	NA*	NA*	NA*	NA*

*Source: Information provided by the Health Institutions, * NA-Not Applicable as per IPHS norms 2012*

As can be seen from **Table 3.11**:

- All IPD services were available in DH Solan.
- In DH Kinnaur, General Medicine, ENT, Ophthalmology, Paediatrics, Accident & Trauma and Burn Ward IPD services were not available.
- In DH Kangra, General Medicine and Orthopaedic IPD services were not available.

No IPD service was available in CH Chango and CH Kandaghat while in the other selected CHs, two to six IPD services were available.

Similarly, in four[6] out of seven selected CHCs, only one (General Medicine) in-patient service was available and in remaining three[7] CHCs, IPD services were not available as of March 2023.

Due to non-availability of in-patient services, HIs failed to provide comprehensive healthcare services to the people.

(i) Impact of shortage of specialists/paramedical staff on OPD/IPD services/Bed occupancy rate

HIs-wise impact of shortage of specialists on OPD & IPD services is discussed below:

- As discussed in Chapter II **Para 2.2.3.1,** the shortfall in availability of specialists in DHs, when compared with IPHS norms 2012 ranged (March 2023) between 25 *per cent* (Shimla) to 94 *per cent* (Lahaul & Spiti) with the exception of DH Solan where there was an excess of 11 *per cent*. This shortage led to non-functioning of certain OPD departments in all DHs and IPD departments in the selected DHs as discussed in **Para 3.1.1.10** and **Para 3.1.2.4** respectively. Further, shortage of specialists could have impacted Bed Occupancy Rate (BOR) in Health Institutions.
- As discussed in Chapter II **Para 2.2.3.3** (**Map 2.11**), in all the CHs in the State, the shortfall in availability of specialists against IPHS norms 2012 ranged (March 2023) from seven *per cent* (Shimla district) to 100 *per cent* (Lahaul & Spiti and Kinnaur districts). This shortage led to non-functioning of certain OPD departments and IPD departments as discussed in **Para 3.1.1.10** and **Para 3.1.2.4** respectively.
- As discussed in Chapter II **Para 2.2.3.3** (**Map 2.12**), in all the CHCs in the State, the shortfall in availability of specialists against IPHS norms 2012 ranged (March 2023) from 70 *per cent* (Solan district) to 100 *per cent* (Lahaul & Spiti, Kinnaur, Chamba, Bilaspur, Kullu and Mandi districts). This shortage led to non-functioning of certain OPD departments and IPD departments in CHCs as discussed in **Para 3.1.1.10** and **Para 3.1.2.4** respectively.
- In the selected HIs, due to non-availability of radiologists (CH Jawalamukhi, CH Shahpur, CH Jaisinghpur and CH Baijnath), radiographers (CH Chango, PHC Spillow and PHC Ribba) and perfusionists (RPGMC, Kangra), the ultrasound, X-ray and heart lung machines were lying idle as discussed in **Para 2.2.5.4** and **Para 2.2.1.3** respectively.

(ii) Impact of shortage of equipment on healthcare services

HIs-wise impact of shortage of equipment on healthcare services is discussed below:

- As discussed in Chapter IV **Para 4.9.1.1, s**hortage of types of equipment in the test checked DHs ranged between 38 and 46 *per cent* in 14 departments which led to healthcare services being affected in the selected HIs.

[6] CHCs Sangla, Pooh, Syri and Dharampur.
[7] CHCs Bachhwai, Majheen, and Bir.

- As discussed in Chapter IV **Para 4.9.1.2,** shortage of types of equipment in the test checked CHs ranged between 48 and 99 *per cent* in 12 departments which led to healthcare services being affected in the selected HIs.

Thus, the shortage of specialists and equipment at all levels of HIs led to non-availability of essential OPD and IPD services, as a result of which patients requiring treatment were either referred to higher HIs or availed treatment from private facilities.

3.1.2.5 Evaluation of In-patient services through Outcome Indicators (DHs, CHs and CHCs)

Patient services provided in IPD can be evaluated through certain outcome indicators (OIs) like Bed Occupancy Rate (BOR), Average Length of Stay (ALoS), Leave Against Medical Advice (LAMA) and Referral Out Rate (ROR) etc. The detail about these ratios is shown in **Table 3.12**:

Table 3.12: Calculation of quality indicators

Type	Quality indicator	Numerator	Denominator
Productivity of hospital	BOR (in *per cent*)	Total patient bed days in a month	Total number of functional beds x number of days in a month
Efficiency of hospital	ROR (in *per cent*)	Total number of cases referred to other facility	Total number of admissions
Clinical care capability of hospital	ALoS (in days)	Total patient bed days	Total number of admissions
Service quality of a hospital	LAMA (in *per cent*)	Total number of LAMA and absconding cases	Total number of admissions

Audit evaluated the four outcome indicators in the selected HIs and the findings are discussed below:

(i) Bed Occupancy Rate (BOR)

Bed Occupancy Rate (BOR) is used to examine how effectively the hospital's in-patient capacity is being utilised for in-patient care. As per IPHS norms 2012, in DHs, the hospital bed occupancy rate should be at least 80 *per cent*. In case of CHs and CHCs, no norms are prescribed in IPHS norms 2012 for BOR. BOR of the selected HIs upto CHCs level is given in **Table 3.13**:

Table 3.13: BOR (in *per cent*) of selected HIs in IPD services

District	HI	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Kinnaur	DH Kinnaur	32.19	22.71	17.10	14.72	13.47	22.58
	CHC Sangla	-	6.70	5.61	5.01	6.23	7.40
	CHC Pooh	0.14	0.41	0.23	0.14	0.27	3.29
Solan	DH Solan	83.28	211.54	178.02	178.51	112.56	66.74
	CH Kandaghat	50.36	42.32	56.90	65.48	42.22	27.32
	CHC Syri	0.36	0.91	0.55	0.64	2.65	2.25
	CHC Dharampur	8.19	4.97	5.17	5.11	5.14	47.67
Kangra	DH Kangra	47.57	32.87	36.80	33.08	13.14	9.66
	CH Thural	41.76	42.76	45.82	23.29	11.95	30.56
	CH Jawalamukhi	66.59	81.40	101.77	81.33	25.97	45.86
	CH Shahpur	81.04	90.90	69.29	72.38	44.68	24.04
	CH Baijnath	69.86	57.84	46.60	46.79	21.79	10.82

Source: Information provided by the Health Institutions.

As can be seen from **Table 3.13**:

- In the selected DHs, BOR was more than 100 *per cent* in DH Solan during 2017-21 which indicates that there was shortage of beds.
- In the selected CHs having IPD services, BOR was ranging between 11 *per cent* and 102 *per cent*.
- In the selected CHCs having IPD services, BOR was less than nine *per cent* except for 48 *per cent* in 2021-22 in CHC Dharampur.

Non-availability of required services in the selected HIs was one of the reasons for low BOR in DHs, CHs and CHCs. The department may relook into the requirement vis-à-vis distribution of beds across the HIs for optimum utilisation of the services.

(ii) Average Length of Stay (ALoS)

Average Length of Stay (ALoS) is an indicator of clinical care capability and to determine effectiveness of interventions. ALoS is the time between the admission and discharge/death of the patient and is expressed in number of days. ALoS in respect of the selected HIs are shown in **Table 3.14**.

Table 3.14: ALoS (in days) in respect of selected HIs

District	Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Kinnaur	DH Kinnaur	3	3	3	3	3	3
	CHC Sangla	NA	1.5	1.5	1.5	1.5	2
	CHC Pooh	1	1	1	1	1	1
Solan	DH Solan	3	3	3	3	3	3
	CH Kandaghat	1	1	2	2	2	2
	CHC Syri	1.33	2	2	2	2	2
	CHC Dharampur	0.26	0.15	0.16	0.13	0.24	2
Kangra	DH Kangra	4.59	3.93	3.97	3.68	5.33	2
	CH Thural	0.64	0.75	0.85	0.87	0.91	2
	CH Jawalamukhi	1.5	1.5	1.5	1.5	1.5	2
	CH Shahpur	3	3	3	3	3	2
	CH Baijnath	4.5	4.5	4.5	4	4	2

Source: Information provided by the Health Institutions..

In all the selected HIs (DHs, CHs and CHCs), ALoS within which patients were either discharged after full treatment or they were referred to higher level hospital ranged between one day to five days.

(iii) Leave Against Medical Advice (LAMA)

To measure service quality of HIs, LAMA rate and Absconding Rate are evaluated. LAMA is the term used for a patient who leaves the hospital against the advice of the doctor and Absconding Rate refers to patients who leave the hospital without informing the hospital authorities. Scarce data is available on various aspects of the problems like type of cases, reasons where patients leave etc. LAMA cases in the selected districts are shown in **Table 3.15**:

Table 3.15: LAMA rate in selected HIs (in *per cent*)

District	HIs	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Kinnaur	DH Kinnaur	0.05	0	0.18	0.26	0	0.40
	CHC Sangla	0	0	0	0	0	0
	CHC Pooh	0	0	0	0	0	0
Solan	DH Solan	0.63	0.22	0.37	0.36	0.39	0.92
	CH Kandaghat	0.22	0.65	0.82	1.05	1.23	1.47
	CHC Syri	0	0	0	0	0	0
	CHC Dharampur	0	0	0	0	0	0.38
Kangra	DH Kangra	0.11	0.10	1.31	1.57	0.54	1.48
	CH Thural	0.14	0.08	0.13	0.03	0.06	0.05
	CH Jawalamukhi	0.97	0.50	0.61	0.39	0.24	0.30
	CH Shahpur	0.47	0.45	0.08	0.45	0.43	1.37
	CH Baijnath	2	3.34	3.97	1.37	1.09	2.11

Source: Information provided by the *Health Institutions.*

In four of the selected HIs, there were no instances of LAMA cases. LAMA cases remained below four *per cent* in the remaining selected HIs which indicated that the doctor's advice has been well accepted by the patients.

(iv) Referral Out Rate (ROR)

Referral to higher level HIs denotes that the facilities for treatments were not available in the HIs. Referral Out Rate (ROR) in selected HIs are as per **Table 3.16.**

Table 3.16: ROR (in *per cent*) in selected HIs

District	Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Kinnaur	DH Kinnaur	1.46	3.88	7.50	5.94	3.98	3.24
	CHC Sangla	NA	15.34	20.51	26.23	22.77	11.48
	CHC Pooh	0	0	0	0	0	16.67
Solan	DH Solan	6.11	2.62	3.09	3.18	3.64	8.24
	CH Kandaghat	3.88	4.40	4.04	2.30	1.95	5.21
	CHC Syri	33.33	0	0	0	6.90	0
	CHC Dharampur	0.72	2.07	0.85	1.05	1.07	3.26
Kangra	DH Kangra	4.09	4.91	5.14	6.49	10.42	9.77
	CH Thural	2.27	2.40	3.47	1.87	4.41	2.05
	CH Jawalamukhi	7.86	7.54	4.78	4.64	6.37	4.90
	CH Shahpur	7.03	7.75	8.86	7.83	7.30	8.05
	CH Baijnath	4.79	4.94	6.17	4.22	11.32	16.62

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.16** that:

- The highest ROR was in DH Kangra at DHs level, which could be due to shortage of specialists as discussed in **Para 2.2.3.1** and non-availability of five OPD services as discussed in **Para 3.1.1.10**. ROR was also high in DH, Solan (8.24) in 2021-22, whereas in DH Kinnaur (2016-22) and DH Solan (2016-21), ROR was relatively low.
- In case of CHs and CHCs, ROR was relatively low in all the selected CHs and CHCs except for CHC Sangla where for consecutive four years ROR was high ranging between 11 *per cent* and 26 *per cent*, which could be due to non-availability of four OPD services as discussed in **Para 3.1.1.10**.

3.1.3 Emergency Services

Emergency services in HIs are provided by Emergency ward or Emergency Room (ER) which is a medical treatment facility specialising in acute care of patients who come in emergency. Due to the unplanned nature of patient attendance, the department provides initial treatment to a broad spectrum of ailments and injuries, some of which may be life threatening and require immediate medical attention. Therefore, IPHS norms 2012 envisage 24x7 operational emergency with dedicated emergency room in every HI up to PHC level.

3.1.3.1 Availability of Emergency services (Tertiary Level)

The number of patients admitted, referred from other hospitals and referred to other hospitals in emergency by the two tertiary level medical hospitals during 2016-17 to 2020-21 is detailed in **Table 3.17**.

Table 3.17: Patients admitted, referred from other hospitals and referred to other hospitals

Year	Name of the institution	Patients admitted directly	Patients referred from other HIs	Patients died	Patients referred to higher HIs of other State
2016-17	IGMC	27,832	540	N/A	80
	RPGMC	32,356	205	119	127
2017-18	IGMC	32,592	140	N/A	100
	RPGMC	33,804	180	71	122
2018-19	IGMC	30,969	1,610	N/A	112
	RPGMC	30,381	120	123	121
2019-20	IGMC	44,106	415	84	132
	RPGMC	32,868	61	147	81
2020-21	IGMC	37,376	108	96	62
	RPGMC	18,189	48	75	80

Source: Information provided by the Health Institutions; N/A- Data not available.

From **Table 3.17** it can be seen that:

- In both MCHs, the number of patients admitted in emergency department during 2016-21 shows a mixed trend.

In IGMC, the number of patients referred to higher hospitals showed an increasing trend during 2016-20 and decreased in 2020-21 and there was an increase in number of death cases in emergency department from 2019-20 to 2020-21.

The Sr.MS, IGMC stated (May 2022) that due to less availability of ventilators, family opinion or further management, the patients were referred to higher hospitals.

- In RPGMC, the trend for referral cases was decreasing marginally throughout the period 2016-21.

3.1.3.2 Availability of emergency services (Secondary level and Primary level)

In all the DHs in the State, emergency service was available as of March 2023. In the selected HIs Audit observed that emergency services were available in all the DHs, CHs and CHCs except in CH Chango and CHC Majheen. In case of PHC, emergency service was not

available in any of the selected institutions. Due to absence of emergency services in the HIs, patients had to move to some other HIs having emergency service.

- In DHs, Emergency ward should have dedicated triage[8], resuscitation and observation area and screens shall be available for privacy. Out of the selected DHs, only DH Kinnaur and DH Kangra have this facility.
- It was also envisaged that separate provision for examination of rape/sexual assault victims should be made available in the emergency department in DHs. Separate provision was available only in DH Kinnaur and DH Kangra.

3.1.3.3 Emergency Cases (Secondary level and Primary level)

Despite availability of emergency services (except for CH, Chango and CHC, Majheen), emergency cases were referred to higher level HIs either due to lack of proper facility or for further investigation/expert opinion. The number of emergency cases referred to higher HIs is shown in **Table 3.18**.

Table 3.18: Emergency cases referred to higher HIs during 2016-21

District	Hospital	Patients Admitted	Patients referred	Percentage of patients referred
Kinnaur	DH Kinnaur	2,013	390	19.37
	CH Chango	Service not available		
	CHC Pooh	628	46	7.32
	CHC Sangla	1,176 (except 2016-17)	29	2.47
Solan	DH Solan	1,38,889	1,750	1.26
	CH Kandaghat	8,863	323	3.64
	CHC Syri	5,546	283	5.10
	CHC Dharampur	63,881	2,598	4.07
Kangra	DH Kangra	1,86,455	4,463	2.39
	CH Thural	16,183	839	5.18
	CH Jawalamukhi	12,209	396	3.24
	CH Shahpur	40,398	647	1.60
	CH Baijnath	34,564	801	2.32
	CHC Bachhwai	143	143	100
	CHC Majheen	Service not available		
	CHC Bir	401	73	18.20

Source: Information provided by the Health Institutions.

From **Table 3.18** it can be seen that:

- In DH Kinnaur, 19.37 *per cent* emergency cases were referred to higher HIs which could be due to shortage of specialists as discussed in **Para 2.2.3.1** and non-availability of six IPD services as discussed in **Para 3.1.2.4**.
- In CHC Bachhwai, 100 *per cent* emergency cases were referred to higher HIs which could be due to upgrading erstwhile PHC to CHC without providing additional infrastructure and additional equipment as discussed in **Para 2.2.6**. Also, IPD services were not available as discussed in **Para 3.1.2.4**.

[8] In the Emergency Department "triage" refers to the methods used to assess patients' severity of injury or illness within a short time after their arrival, assign priorities, and transfer of each patient to the appropriate place for treatment.

- In CHC Bir, 18.20 *per cent* emergency patients were referred to higher HIs which could be due non availability of IPD services as discussed in **Para 3.1.2.4**.

3.1.3.4 Trauma Centres in the State

Under Centrally Sponsored Scheme (CSS) 'Capacity Building for Developing Trauma Care Facilities in Government Hospitals located on National Highways,' GoI provided assistance to State Governments for construction of Trauma Centers for immediate emergency care to victims of accidents on National Highways. GoI sanctioned (October 2015) funds of ₹ 30.04 crore (Central share: ₹ 27.04 crore and State share: ₹ 3.00 crore) for establishment and strengthening of trauma care facilities in five hospitals in the State located at Kangra, Chamba, Hamirpur, Mandi and Rampur. Of these, only the trauma center at Nerchowk, Mandi, was operational.

Further, Level III[9] Trauma Centres were also sanctioned by the GoI under NHM for ₹ 8.29 crore during December 2019 at CHC Nalagarh, CHC Kotkhai and DH Una. These Trauma Centers were also not made operational[10] (July 2022) as commented in Chapter VII.

In the exit conference (January 2023), the Secretary (Health) stated that of these Trauma centers only one (Nerchowk, Mandi) was made operational and the remaining were under execution.

The Government in its reply (January 2024) stated that the construction work of Trauma Centre Level-II at RPGMC Kangra had been completed and machinery and equipment worth ₹ 4.09 crore was purchased. The process for purchase of balance was under progress and the patients were being treated in casualty ward. The civil work of Trauma Centre at RKGMC Hamirpur was under construction and some equipment have been purchased and remaining were being purchased. The machinery and equipment for Trauma Centre at Pt. JLNGMC Chamba has been purchased and the patients are treated in casualty ward. For Trauma Centre at IGMC Shimla, construction work has been completed, procurement of machinery is under process and the Trauma Centre will be made functional as soon as approval of the NGT is received.

3.1.3.5 Trauma centre (Tertiary Level)

For developing trauma care facility in IGMC Shimla located on the National Highway, the Government sanctioned (August 2021) funds of ₹ 30.90 crore in different phases. As of June 2022, the construction work had been substantially completed after incurring an expenditure of ₹ 28.00 crore. It was also observed that approval from National Green Tribunal (NGT) was awaited. Further ₹ 3.01 crore were incurred for purchase of machinery and equipment, which was lying unutilised.

During joint physical inspection of Emergency services conducted by Audit, against the checklist of NHM Assessor Guidebook 2013 (DHs)[11], it was noticed that:

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[9] Does not have full availability of specialists but has resources for emergency resuscitation, surgery and intensive care for trauma patients.

[10] The non-functioning of these trauma centers in the State was also reported in Para 2.2 of the Report of the Comptroller and Auditor General of India on Compliance Audit of Social, General and Economic Sectors for the year ended 31 March 2020.

[11] As norms for MCHs were not available in NMC guidelines.

- In IGMC Shimla, the emergency ward was not easily accessible as the entrance was shared with OPD registration as shown in **Picture 3.11**. Private vehicles were parked near the emergency entrance causing hindrance to ambulance and patients coming in their own cars**.**
- In both the MCHs, male and female patients were treated together in the same ward, thereby privacy of the patients was not ensured as shown in **Picture 3.12** (IGMC).
- Beds were not fitted with centralised oxygen supply in IGMC as shown in **Picture 3.13**, while in RPGMC, Kangra, only two beds were found fitted with centralised oxygen supply.
- Dedicated triage system was not available in both the MCHs.
- In both the MCHs, no defined emergency protocol was in place.
- In both MCHs, multiparameter monitor and ventilator were not available in the emergency ward.
- New trauma centres were being set-up/constructed in both the MCHs but were not operational. In RPGMC, equipment like cardiac monitors with defibrillator, beds and ventilators were uninstalled and lying idle in the newly constructed trauma centre as shown in **Picture 3.14.**

Picture 3.11: Emergency Services adjacent to OPD Block at IGMC, Shimla

Picture 3.12: Male and female patients treated together in emergency ward at IGMC, Shimla

Picture 3.13: Emergency ward beds without centralised oxygen supply at IGMC, Shimla

Picture 3.14: Uninstalled and idle equipment of Trauma Centre at RPGMC, Kangra.

3.1.3.6 Trauma Care Centre (Secondary level)

Road traffic deaths and injuries are unpredictable and preventable. It is an accepted strategy of Trauma Care that if basic life support, first aid and replacement of fluids can be arranged

within the first hour of the injury (the Golden hour), lives of many of the accident victims can be saved. Kinnaur district, being highly vulnerable to landslides and where road accidents are very frequent, the trauma care centre should be available 24x7 to cater to the emergency patients within the Golden hour.

It was observed that trauma care centre was not available in DH Kinnaur as of December 2022. In the absence of a functional trauma care centre, patients with serious injuries were referred out to facilities in other districts. As per HMIS data, during 2016-22 there were 3,926[12] cases of accidents and burns in Kinnaur district and the patients had to be rushed to Shimla/Rampur (80-200 km away) / other districts for treatment. Similarly, in Solan and Kangra, full-fledged trauma centre was not available, and these patients were being treated in emergency wards of the hospitals.

3.1.4 Super Speciality services (Operation Theatre, Intensive Care Unit)

3.1.4.1 ICU services (Tertiary level)

As per NMC norms, MCHs should have eight[13] ICU wards. In both the selected MCHs, only five[14] ICUs wards were available. Further, IPHS norms 2012 for DHs stipulates that the number of beds in the ICU may be restricted to five *per cent* of the total bed strength initially but should be expanded to 10 *per cent* gradually. In IGMC, the total operational beds were 873 and the total ICU beds were 26, which is only 2.98 *per cent* of the total bed strength. In RPGMC, the total operational beds were 866 and the total ICU beds were 66, which is 7.62 *per cent* of the total bed strength.

During joint physical inspection of ICU services conducted by Audit, it was noticed that:

- General ICU at IGMC Shimla had six ICU beds equipped with all necessary instruments and equipment and was in close proximity to OT and Blood Bank. Portable X-ray and USG were available on call basis from other departments.
- In Cardiac Care Unit (Medicine), 2-D Echo machine was not working, and 3-D portable machine was available on call basis. Instruments for measuring room temperature and humidity were not available. Seepage and dampness were noticed on the walls as shown in **Picture 3.15,** thereby compromising the hygiene of the ward.

[12] For the year 2016-17, only death cases related to accidental/trauma/burns were available in HMIS and the same has been considered.

[13] Intensive Care Unit (ICU), Intensive Coronary Care Unit (ICCU), Intensive Respiratory Care unit (IRCU), Paediatric Intensive Care (PICU), Neonatal Intensive Care Unit (NICU), Critical Care Burns Unit, Post-op Surgical Critical Care Unit, Obstetric HDU/ICU.

[14] The following were not available in (i) IGMC- PICU, NICU and CCU (Burns) (ii) RPGMC- IRCU, CCU (Burns) and HDU.

Picture 3.15: Seepage and dampness of the wall of CCU at IGMC Shimla.

3.1.4.2 ICU services (Secondary level)

As per IPHS norms 2012, Intensive Care Units in DHs is an essential service with minimum four beds and in case of CH, ICU service is desirable with minimum four beds.

In all the DHs in the State, ICU service was available as of March 2023 except in DH Chamba, Kangra, Solan and Lahaul & Spiti. In the selected CHs, none of the hospitals had ICU.

Due to absence of ICU facility in DHs and CHs, there was every likelihood of critical patients being referred to other HIs where facilities were available, thereby delaying critical cases.

3.1.4.3 Operation Theatre (Tertiary level)

During joint physical inspection of OTs conducted by Audit, it was noticed that:

- In both MCHs, OTs had preparation room, pre-operative room, post-operative rooms and nurse duty rooms.
- In RPGMC Kangra, Central oxygen supply was available in the OT.
- In RPGMC Kangra, OTs were closely located to blood bank, ICU and Radiology but were not in close proximity to Pathology department. In IGMC Shimla, OTs were in close proximity to OPD, pre and post-operative room but ICU, radiology, pathology and blood banks were not in close proximity to OTs.
- In the medicine store of IGMC Shimla (Main OT), 42 consumables and 40 drugs were indented (June 2022), out of which six consumables and 18 drugs were not supplied by the medicine store of the MCH. Dampness of the wall of the main OT medicine store was noticed and drugs were stored in direct sunlight as shown in **Pictures 3.16** and **3.17** respectively**.**
- In IGMC Shimla, changing room and patients waiting area of main OT was found to be without proper ventilation and illumination.

Picture 3.16: Dampness on the wall of main OT medicine store IGMC, Shimla

Picture 3.17: Drugs stored in direct sun light at IGMC, Shimla

3.1.4.4 Operation Theatre (Secondary level)

One of the essential services that is being offered in Secondary level HIs (DHs, CHs and CHCs) is Operation Theatre (OT). IPHS norms 2012 prescribe OT for elective major surgery, emergency services and Ophthalmology/ENT for DHs/CHs (two to four as per need) and in case of CHC, one operation theatre should be available. Details of major and minor operations carried out in the selected DHs is shown in **Table 3.19**:

Table 3.19: Number of operations carried out in selected DHs

Year	DH Kinnaur					DH Solan					DH Kangra				
	Major	Minor	Total	No. of surgeons	Surgery per surgeon per year	Major	Minor	Total	No. of surgeons	Surgery per surgeon per year	Major	Minor	Total	No. of surgeons	Surgery per surgeon per year
2016-17	18	547	565	1	565	1,445	700	2,145	9	238	841	121	962	1	962
2017-18	1	591	592	1	592	975	1,061	2,036	10	204	619	32	651	1	651
2018-19	67	998	1,065	2	533	1,410	1,120	2,530	8	316	519	33	552	1	552
2019-20	291	992	1,283	2	642	1,023	806	1,829	9	203	261	21	282	1	282
2020-21	834	832	1,666	2	833	652	224	876	8	110	2	0	2	1	2
2021-22	1,039	920	1,959	3	653	511	316	827	11	75	30	2	32	1	32

Source: Information provided by the Health Institutions.

As can be seen from **Table 3.19**:

- Major operations were carried out in all the selected DHs.
- During 2016-22, number of surgeries per doctor per year in the selected DHs ranged between 533 and 833 for DH Kinnaur, between 75 and 316 for DH Solan and between two and 962 for DH Kangra.

Further it was noticed that in DH Kinnaur, major operations were conducted without the services of a regular anaesthetist during August 2016 to April 2018 as mentioned in **Para 2.2.3.5**.

Table 3.20: Number of operations carried out in selected CHs

Year	Chango		Kandaghat		Shahpur		Baijnath		Jawalamukhi		Thural	
	Major	Minor	Major	Minor	Major	Minor	Major	Minor	Major	Minor	Major	Minor
2016-17	0	0	0	0	0	0	2	12	0	505	0	0
2017-18	0	0	0	0	0	0	3	30	0	437	0	0
2018-19	0	0	0	0	0	0	2	56	0	574	0	0
2019-20	0	0	0	0	0	0	10	37	0	634	0	0
2020-21	0	0	0	0	0	0	7	18	0	572	12	14
2021-22	0	0	0	8	0	0	7	0	0	0	18	0
Total	**0**	**0**	**0**	**8**	**0**	**0**	**31**	**153**	**0**	**2,722**	**30**	**14**

Source: Information provided by the Health Institutions.

In two out of the six selected CHs, 31 and 30 major operations were conducted in CH Baijnath and CH Thural respectively during 2016-22 and in the other four CHs, no major operations were conducted. In four[15] out of the six selected CHs, 2,897 minor surgeries were conducted during 2016-22. In the other two CHs (Shahpur and Chango), no operations were conducted.

Among the selected CHCs, OT was available in CHC Syri, however it was non-functional due to non-posting of staff. The patients requiring OT services were referred to DH, Solan.

3.1.5 Maternity services

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period, whereas pre-natal health refers to health of women from 22 completed weeks of gestation until seven completed days after birth. New-born health is the baby's first month of life. A healthy start during the prenatal period influences infancy, childhood and adulthood.

From the time of the launch of the National Rural Health Mission in 2005, Community Processes have been at the heart of the outcomes of the Mission. The Accredited Social Health Activist (ASHA) programme was introduced as a key component of the Community Processes Intervention. Over the past years, the ASHA programme has emerged as the largest community health worker programme in India and is considered a critical contributor to enabling people's participation in health. Maternity services are being provided through HSCs, PHCs, CHCs, CHs and DHs.

3.1.5.1 Availability of ASHA workers in the state

The Community Processes guidelines issued by NRHM (June 2013) encompassing ASHA provides population as a criterion[16] for selection of ASHA worker in the State. As per population of the State for the year 2022 (78,53,169 as of 31/03/2022[17]) there should be 7,853 ASHAs in the State.

It was noticed that there were 7,848 ASHAs in the State as of March 2022, which shows that one ASHA was available for a population of 1,000. In the eight selected BMOs, against the population of 7,50,712, 794 ASHAs were available as on 31/03/2021 which shows that one ASHA was available for a population of 946.

3.1.5.2 Training in the State and selected BMOs

Capacity building of ASHA is critical in enhancing their effectiveness. It was envisaged that training will help to equip them with necessary knowledge and skills, resulting in achievement of the schemes objectives.

Audit noticed that against the target of 27,724 number of ASHAs to be trained in the State, 26,414 ASHAs were trained, which was more than 95 *per cent* of the target. The details are given in **Table 3.21**.

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15 CH Kandaghat-eight, CH Baijnath-153, CH Thural-14 and CH Jawalamukhi-2,722.

16 The general norm will be 'One ASHA per 1000 population'. In tribal, hilly, desert areas, the norm could be relaxed to one ASHA per habitation, depending on workload etc.

17 Projected population of Himachal Pradesh in 2022 as per Directory of HIs by GoHP (2022).

Table 3.21: Details of training imparted to ASHAs

Year	No. of ASHAs targeted to be trained during the year	No. of ASHAs trained during the year
2016-17	7,301	7,040
2017-18	6,258	5,967
2018-19	5,848	5,457
2019-20	4,712	4,379
2020-21	3,512	3,479
2021-22	93	92
Total	**27,724**	**26,414 (95.27 *per cent*)**

Similarly, in the eight selected Block Medical Officers, against the target of 3,271 number of ASHAs to be trained, 3,252 (99.42) ASHAs were trained with a marginal shortfall of 19 (0.58 *per cent*). Thus, the training coverage of ASHAs in the State was commendable.

3.1.5.3 Activities conducted by ASHAs

ASHA is a health activist in the community who will create awareness on health and its social determinants and mobilise the community towards local health planning and increased utilisation and accountability of the existing health services. She would be a promoter of good health practices.

Details of the main activities carried out by ASHAs during 2020-21 in the eight selected BMOs is shown in **Table 3.22**.

Table 3.22: Details of the main activities carried out by ASHAs during 2020-21

Activities of Asha	Name of Block Medical Office							
Name of Activities	**Dharampur**	**Syri**	**Thural**	**Mahakal**	**Jawalamukhi**	**Shahpur**	**Pooh**	**Sangla**
Nos. of ASHA workers	141	47	91	110	180	162	31	40
Nos. of ANCs	2,574	284	278	549	282	605	251	277
Nos. of Deliveries reported (institutional)	482	251	171	757	263	589	210	277
Nos. of full immunisations 1st year	1,949	484	903	1,167	1,902	1,580	310	136
Nos. of full immunisations 2nd year	1,825	514	749	1,147	1,871	1,627	352	130
No. of beneficiaries covered under MAA[18]	0	36	154	229	32	599	96	44
No. of beneficiaries covered under VHND[19]	883	374	1,068	995	0	613	297	300
Total	**7,854**	**1,990**	**3,414**	**4,954**	**4,530**	**5,775**	**1,547**	**1,204**

In Himachal Pradesh, the ASHA worker was provided honorarium @ ₹ 1,250/- per month upto June 2019 which was revised to ₹ 1,500/- in July 2019, ₹ 2,750/- in April 2021 and ₹ 4,700/- in April 2022.

3.1.5.4 Maternity services (Tertiary level)

Kamla Nehru State Hospital (Mother and Child) under IGMC Shimla had 247 beds and RPGMC Kangra had 102 beds, with another 200 bedded new Mother & Child Hospital block

[18] MAA- Mother's Absolute Affection Programme- Programme to improve the nutrition of the children by refocusing on breastfeeding and Infant Young Child Feeding Practices.

[19] VHND- Village Health and Nutrition Day -monthly day to provide ANC etc. to women and vaccine etc. to children.

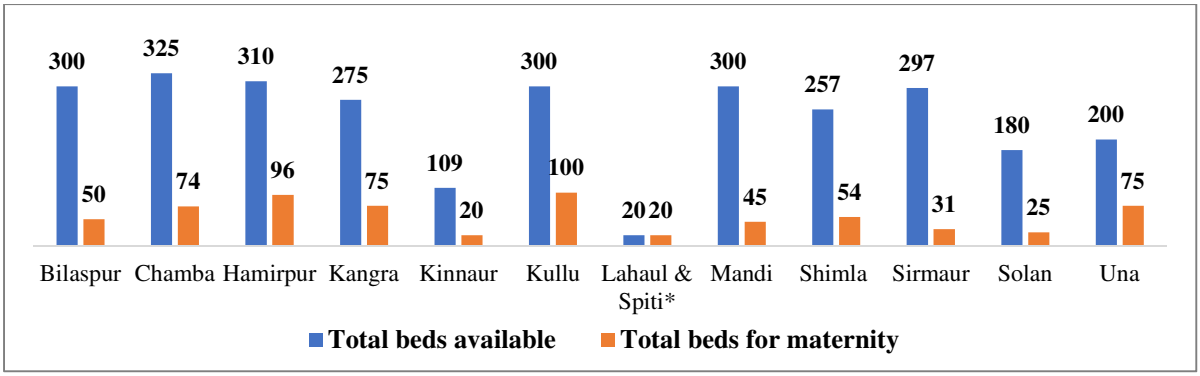
under construction. The only gynaecologist posted in KNSH (IGMC) Shimla, was transferred during May 2019 to DH Mandi. During the above period, services of a gynaecologist from IGMC were availed. In RPGMC Kangra, there was no shortage of manpower.

It was observed that there were 118 (Shimla-48, Kangra-70) maternal deaths and 396 neonatal deaths in Shimla, (data for Kangra not available) during 2016-21. In both the hospitals, review for the reasons of death was conducted.

3.1.5.5 Maternity services (Secondary level)

1. Availability of maternity beds against total available beds in all district hospitals in the State is shown in **Chart 3.6**.

Chart 3.6: Availability of maternity beds against total available beds in all district hospitals as of March 2022



**In DH Lahaul & Spiti, no beds have been earmarked for maternity ward.*

It can be seen from **Chart 3.6** that:

- Availability of maternity beds against total beds in the DHs ranged between 10 to 38 *per cent*.
- In DH Kinnaur, minimum 20 beds were available whereas in DH Kullu maximum 100 beds were available.

2. Audit observed that there was shortage of gynaecologists in the selected HIs as detailed in **Table 3.23**.

Table 3.23: Availability of Gynaecologists in selected HIs

Name of hospital	Sanctioned bed strength	Total deliveries (2016-21)	Gynaecologist as per IPHS norms 2012	Gynaecologist available				
				2016-17	2017-18	2018-19	2019-20	2020-21
DH Kinnaur	125	1,684	2	0	0	1	1	1
DH Solan	200	12,786	3	1	2	2	1	1
DH Kangra	300	3,868	4	2	0	1	1	2
CH, Chango	10	3	1	0	0	0	0	0
CH Kandaghat	50	179	1	0	0	0	0	0
CH Thural	100	210	1	0	0	0	0	0
CH Jawalamukhi	100	2,617	1	0	0	0	0	0
CH Shahpur	100	1,758	1	0	0	1	1	1
CH Baijnath	100	686	1	0	0	0	0	0

Source: Information provided by the Health Institutions, HMIS data and Hospital Records

From **Table 3.23**, it can be seen that though gynaecologists were available in the selected DHs and one CH (Shahpur) out of the six selected CHs, availability was not in line with IPHS norms during all the years. Gynaecologist was not available in any of the selected CHCs.

Hence, it was evident that the deliveries were being conducted in the five CHs without availability of regular gynaecologists. Though two maternal deaths (DH Solan-one, DH Kangra-one) and 37[20] neonatal deaths were noticed during 2016-21, no death review was conducted for maternal and neonatal deaths. It also transpires that complicated pregnancy cases were either referred to private hospitals or to other districts for treatment.

In the exit conference (January 2023), the Secretary (Health) stated that non-availability of gynaecologist in Kinnaur district was due to difficult topology. Area based incentives are being planned to encourage doctors to choose these areas. Further, regarding providing of specialists in CHs, it was stated that the government is planning for identification of blocks for posting of specialists.

3.1.5.6 Labour room services (Secondary and primary)

Labour room is usually a furnished room in HIs where both labour and deliveries take place. IPHS norms 2012 envisage that HIs (DHs/CHs/CHCs/PHCs) should have labour room at all levels. Details of availability of labour rooms in the selected districts are shown in **Table 3.24**.

Table 3.24: Availability of labour room in selected districts as on date of audit

Total Number HIs	Kinnaur District				Solan District				Kangra District			
	DH	CH	CHCs	PHCs	DH	CH	CHCs	PHCs	DH	CH	CHCs	PHCs
	1	1	4	23	1	5	7	38	1	21	23	89
HIs having Labour room	1	0	4	1	1	5	7	6	1	18	14	5

Source: Information provided by the Health Institutions.

From **Table 3.24**, it can be seen that labour rooms were available in all the selected DHs, in 23 out of 27 CHs, 25 out of 34 CHCs and 12 out of 150 PHCs. In Kinnaur district, CH Chango, which was the only CH in the district, did not have a labour room. Thus, in the HIs where labour rooms were not available, patients had to move to other HIs where the facility was available.

3.1.5.7 Antenatal Care Facility

As per the Maternal Health Division, Ministry of Health and Family Welfare, all pregnant women (PW) are required to be registered with the nearest healthcare facility and minimum four Antenatal Care (ANC) check-ups are needed to be conducted. All the registered pregnant women should be given Iron Folic Acid (IFA) tablets and Calcium tablets compulsorily. A total of 180 IFA tablets (earlier 100) have been prescribed for six months during pregnancy and are to be continued for six months post-partum.

The position of ANC registration and services provided in the State during 2016-22 is shown in **Table 3.25**.

[20] DH Solan-10, Kinnaur-nine, Kangra-11, CH Baijnath-three, CH Shahpur-three, CH Jawalamukhi-one

Table 3.25: Position of ANC registration and services provided in the State

Year	Total pregnant women registered for ANC	Not registered within first trimester	Not received three*ANC check-ups	Pregnant women who did not receive TT1***	Pregnant women who did not receive TT2	Pregnant women who did not receive 100/ 180** IFA tablets
2016-17	1,21,493	20,096	21,028	41,438	16,968	15,868
2017-18	1,18,966	17,675	59,506	38,066	64,740	49,669
2018-19	1,12,553	14,327	23,998	33,763	39,640	22,627
2019-20	1,10,694	13,835	24,644	39,886	44,717	16,777
2020-21	1,11,417	13,524	25,538	30,511	37,372	16,574
2021-22	1,06,340	13,852	20,945	28,017	34,361	17,486
Total (*per cent*)	**6,81,463**	**93,309 (13.69)**	**1,75,659 (25.78)**	**2,11,681 (31.06)**	**2,37,798 (34.89)**	**1,39,001 (20.39)**

Source: HMIS data
**2017-18 onwards pregnant women are supposed to get four or more ANC check-ups*
***2017-18 onwards pregnant women are supposed to receive 180 IFA.*
**** Tetanus Toxoid*

It can be seen from **Table 3.25** that:

- The number of pregnant mothers who were not registered within the first trimester was 13.69 *per cent* of the total registered pregnant mothers in the State.
- The number of mothers who did not receive three or more ANC check-ups was 25.78 *per cent* of the total registered pregnant mothers in the State.
- Total number of registered mothers showed a decreasing trend in the districts from 2016-17 onwards except in 2020-21.
- The number of pregnant women who did not receive TT1 was 31.06 *per cent* of the total registered pregnant women in the State.
- The number of pregnant women who did not receive TT2 was 34.89 *per cent* of the total registered pregnant women in the State.
- Out of total registered pregnant women, 20.39 *per cent* did not receive 100/180 IFA tablets.

The position of ANC registration and services provided in the selected districts during 2016-17 to 2021-22 are detailed below in **Table 3.26**.

Table 3.26: Position of ANC registration and services provided in the selected districts

Year	Total pregnant women registered for ANC	Not registered within first trimester	Not received three*ANC check-ups	Pregnant women who did not receive TT1	Pregnant women who did not receive TT2	Pregnant women who did not receive 100/180** IFA tablets
2016-17	38,961	5,579	5,674	12,040	4,515	4,643
2017-18	38,024	4,768	19,120	11,059	19,838	15,740
2018-19	36,793	5,112	8,177	10,036	11,879	8,969
2019-20	35,743	5,392	9,428	8,839	10,607	4,553
2020-21	35,969	5,659	9,369	8,702	10,996	6,833
2021-22	34,538	6,313	8,904	8,257	9,944	7,354
Total (*per cent*)	**2,20,028**	**32,823 (14.92)**	**60,672 (27.57)**	**58,933 (26.78)**	**67,779 (30.80)**	**48,092 (21.86)**

*Source: HMIS data, *2017-18 onwards pregnant women are supposed to get four or more ANC check-ups,*
***2017-18 onwards pregnant women are supposed to receive 180 IFA,*
**** Tetanus Toxoid*

It can be seen from **Table 3.26** that:

- The number of pregnant women who were not registered within the first trimester was 14.92 *per cent* of the total registered pregnant women in the selected districts.
- The number of women who had not received three or more ANC check-ups was 27.57 *per cent* of the total registered pregnant women.
- Total number of registered mothers showed a decreasing trend in the districts from 2016-17 onwards upto to 2021-22 except marginal increase in 2020-21.
- The number of pregnant women who did not receive TT1 was 26.78 *per cent* of the total registered pregnant women in the selected districts.
- The number of pregnant women who did not receive TT2 was 30.80 *per cent* of the total registered pregnant women in the selected districts.
- Out of registered pregnant women, 21.86 *per cent* did not receive 100/180 IFA tablets.

Based on the above data, audit noticed that the district health authority was not able to keep track of all pregnant women who were registered for ANC to ensure that they received the stipulated quantum of ANC, timely check-ups and TT and IFA tablets at required intervals.

In the exit conference (January 2023), regarding shortfall in ANC check-up, the Secretary (Health) stated that the position will be checked and detailed reply will be furnished. Further, it was stated that Iron Folic Acid Tablets are now abundantly available and issued which was constrained earlier due to unavailable stock.

3.1.5.8 Preparation of Partographs (MCHs, DHs)

A partograph consists of a graphic representation of the process of labour. It enables the birth attendant to identify and manage complications of labour promptly or to take a decision to refer the patient to a higher medical facility, if required. Overall quality of care as provided by the health centres during labour is also monitored through the partograph.

In the selected MCHs, in RPGMC Kangra, 6,280 (73.90 *per cent*) partographs were plotted against 8,498 deliveries during 2020-21 (2016-20 data not provided by the MCH) and in KNSH Shimla, 32,927 (94.01 *per cent*) partographs were plotted against 35,023 deliveries during 2016-21.

The position of plotting of partograph in the selected DHs is mentioned in **Table 3.27**:

Table 3.27: Position of partographs plotted in selected districts

Year	DH Kinnaur		DH Solan		DH Kangra	
	Total deliveries	Partograph plotted (Nos./ *per cent*)	Total deliveries	Partograph plotted (Nos./ *per cent*)	Total deliveries	Partograph plotted (Nos./ *per cent*)
2016-17	494	324 (65.59)	2,947	589 (19.98)	1,381	1,381 (100)
2017-18	429	363 (84.62)	2,694	805 (29.88)	937	937 (100)
2018-19	347	300 (86.46)	2,510	1,373 (54.70)	562	562 (100)
2019-20	328	313 (95.43)	3,430	1,238 (36.09)	746	746 (100)
2020-21	165	160 (96.97)	2,081	1,058 (50.84)	225	225 (100)
Total	**1,763**	**1,460 (82.81)**	**13,662**	**5,063 (37.05)**	**3,851**	**3,851 (100)**

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.27** that in DH Kangra, 100 *per cent* partographs were plotted while in DH Solan and DH Kinnaur, partographs plotted were in the range of 37 *per cent* to 83 *per cent*.

3.1.5.9 Deliveries through Caesarean section (C-section)

Caesarean or C-section delivery is the use of surgery to deliver babies. NHM Guidelines on "Engaging General Surgeons for Performing Caesarean Sections and Managing Obstetric Complications" stated that around eight to 10 *per cent* of total delivery cases require C-Section.

The statement showing C-section deliveries as per NFHS-5 in the State of Himachal Pradesh is given in **Table 3.28**:

Table 3.28: Status of Caesarean delivery (C-section) in the State

Indicators	2015-16	2019-20
C-section delivery *(per cent)*	21	16.7
Private health facility c-section deliveries (*per cent*)	51.4	44.4
Public health facility c-section deliveries (*per cent*)	17.4	16.4

Source: NFHS 5 survey report

As observed from **Table 3.28**, the percentage of C-section deliveries has reduced from 21 *per cent* in 2015-16 to 16.7 *per cent* in 2019-20 which is a positive indicator. The percentage of C-section deliveries was higher in private health facilities compared to public health facilities of the State.

In the selected MCHs, in RPGMC Kangra, 13,760 (30.23 *per cent*) C-section deliveries were conducted against 45,511 total deliveries during 2016-21 and in KNSH Shimla, 11,138 (31.80 *per cent*) C-section deliveries were conducted against 35,023 total deliveries during 2016-21. Status of C-Section deliveries in the selected DHs is shown in **Table 3.29**.

Table 3.29: C-section deliveries against total IDs in selected DHs

Year	DH Kinnaur		DH Solan		DH Kangra	
	Institutional deliveries	C-section deliveries (*per cent*)	Institutional deliveries	C-section deliveries (*per cent*)	Institutional deliveries	C-section deliveries (*per cent*)
2016-17	494	95 (19.23)	2,947	621 (21.07)	1381	201 (14.55)
2017-18	429	39 (9.09)	2,694	422 (15.66)	937	141 (15.05)
2018-19	347	68 (19.60)	2,510	643 (25.62)	562	110 (19.57)
2019-20	328	59 (17.99)	3,430	509 (14.84)	746	131 (17.56)
2020-21	165	16 (9.70)	2,081	531 (25.52)	225	46 (20.44)

Source: Information provided by the Health Institutions..

As can be seen from **Table 3.29**, C-Section deliveries in the selected DHs ranged between nine *per cent* and 26 *per cent*. In DH Kinnaur, C-Section deliveries were conducted without the services of a regular anaesthesiologist during August 2016 to April 2018. In DH Kangra and DH Kinnaur, C-section deliveries were conducted without any gynaecologist in 2017-18.

C-section deliveries without specialists are very risky as they may lead to life threatening complications for both mother and child.

3.1.5.10 Status of Still birth rate

Still birth rate is a key indicator of the absence of quality care during pregnancy and childbirth. Still births should be as few as possible.

In the selected MCHs, in RPGMC Kangra, 711 (1.56 *per cent*) still births against 45,511 deliveries during 2016-21 and in KNSH Shimla, 581 (1.66 *per cent*) still births against 35,023 deliveries during 2016-21 were reported. Still births status in the selected districts is given in **Table 3.30**:

Table 3.30: Still birth status in the selected Districts

Year	District Kinnaur		District Solan		District Kangra	
	Total no. of deliveries	Total No. of still birth (*per cent*)	Total no. of deliveries	Total No. of still birth (*per cent*)	Total no. of deliveries	Total No. of still birth (*per cent*)
2016-17	614	14 (2.28)	6,473	78 (1.21)	17,337	342 (1.97)
2017-18	463	4 (0.86)	6,662	82 (1.23)	17,218	325 (1.89)
2018-19	420	11 (2.62)	7,324	90 (1.23)	17,155	244 (1.42)
2019-20	424	2 (0.47)	8,510	79 (0.93)	17,916	244 (1.36)
2020-21	291	9 (3.09)	8,730	121 (1.39)	18,184	248 (1.36)
2021-22	299	2 (0.66)	9,184	119 (1.29)	16838	203 (1.20)

Source: HMIS data

As can be seen from **Table 3.30**, the rate of still births ranged between 0.47 *per cent* and 3.09 *per cent* in the selected districts. The still birth rate shows a mixed trend in Kinnaur and Solan district whereas in Kangra district, it was on a decreasing trend.

3.1.5.11 Discharge within 48 hours of delivery

As per Janani Shishu Suraksha Karyakaram (JSSK) Guidelines, the first 48 hours after delivery are vital for detecting any complications and its immediate management. Care of the mother and baby (including immunisation) are essential immediately after delivery and at least upto 48 hours. During this period, the mother may be advised for extra calories, fluids and adequate rest which is required for well-being of the baby and herself.

The position of number of women discharged within 48 hours in all the selected HIs (*per cent*) up to CHC level is shown in **Table 3.31**:

Table 3.31: *Per cent* of pregnant women discharged within 48 hours in selected HIs

District	Hospital	2016-17	2017-18	2018-19	2019-20	2020-21
Kinnaur	DH Kinnaur	15.23	14.76	14	9.90	16.88
	CH Chango	0	0	0	100	0
	CHC Pooh	44.44	11.11	60	66.67	100
	CHC Sangla	0	12.50	50	44.44	4.17
Solan	DH Solan	72.82	84.15	73.45	72.93	73.22
	CH Kandaghat	76	72.22	100	85.29	53.13
	CHC Syri	100	100	100	0	22.22
	CHC Dharampur	85.96	80.95	91.18	64.18	100
Kangra	DH Kangra	14.64	0	0	0	0
	CH Thural	0	34.62	16	47.37	66.67
	CH Jawalamukhi	58.84	67.06	60.09	26.89	38.39
	CH Shahpur	0	17.56	0	0	0
	CH Baijnath	0	0	0	0	37.84
	CHC Bachhwai	0	0	0	0	0
	CHC Majheen	0	0	0	0	0
	CHC Bir	0	0	0	15	0

Source: HMIS data of test-checked hospitals

It can be seen from **Table 3.31** that in seven instances all women were discharged within 48 hours. This trend was mainly observed in CHC Syri (three instances) followed by CH Kandaghat, CHC Dharampur, CHC Pooh and CH Chango (one instance each).

In the exit conference (January 2023), the Secretary (Health) stated that due to non-availability of adequate beds in HIs, mothers had to be discharged from hospital after delivery.

3.1.6 Blood Bank services

As per IPHS norms 2012, Blood Bank is one of the essential services which is to be provided in DHs/CHs. Blood Bank shall be in close proximity to the pathology department and at an accessible distance to OT, ICU, emergency and accident departments. Blood Banks should follow all existing guidelines and fulfil all requirements as per the various Acts pertaining to setting up of the Blood Bank.

In Himachal Pradesh, 25 Public Blood Banks were available.

3.1.6.1 Blood Bank services (Tertiary level)

As per NMC norms, there shall be a well-equipped air-conditioned Blood Bank capable of providing component therapy. The Blood bank and Blood transfusion services should conform to the guidelines of the National AIDS Control Organisation.

During joint physical inspection of Blood Banks (RPGMC Kangra, IGMC Shimla and KNSH Shimla) conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- All the three Blood Banks were having authorisation for blood storage.
- Blood Bank in RPGMC was approachable by road and the other two blood banks were not directly approachable by road. They were approachable through stairs only.
- In none of the Blood Banks, information regarding number of blood units available was displayed, as required in IPHS norms.
- In RPGMC, Kangra, two refrigerators (-80 degree), another normal refrigerator as shown in **Picture 3.18** and some essential equipment like Elisa machine as shown in **Picture 3.19** were non-functional from June 2021, which were essential for maintaining quality & condition of the blood collected.
- All three Blood Bank authorities confirmed that they were adhering to NACO guidelines[21].
- Different components of blood need different storage conditions and temperature requirements for therapeutic efficacy, however, in KNSH Blood Bank, component-wise storage facility was not available.

[21] National AIDS Control Organization guidelines for collection, testing, storing and distribution of blood and its components.

	
Picture 3.18: One of the non-functional refrigerators at RPGMC, Kangra	**Picture 3.19: Non-functional Elisa machine at RPGMC, Kangra**

3.1.6.2 Blood Bank services (secondary level)

In all the DHs in the State, blood bank service was available as of March 2023 except in DH Lahaul & Spiti. This was also confirmed during the audit of selected DHs.

3.1.7 Diagnostic services

Diagnostic service is required to provide effective diagnosis of the disease suffered by the patient, measure the quantum of medicines to be provided, quantify the extent of cure effected, identify the medical sensitivities of the patient to avoid wrong medication resulting in adverse effects and extend the research and development capabilities of the medical process.

3.1.7.1 Availability of Radiology services (Tertiary level)

As per NMC norms, Medical College Hospital should have facilities for conventional, static and portable X-rays, Fluoroscopy, Contrast studies, Ultra-sonography, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) facility.

During joint physical inspection of Radiology services conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- In IGMC, Shimla, quality assurance test of various X-ray machines was not conducted by due dates as required in E-licensing of Radiation Applications System Guidelines, 2016.
- In both the MCHs, it was noticed that the waiting period of the OPD patients for MRI service was around 90 days. For CT scan, the waiting period was 30 days in RPGMC Kangra and 40 days in IGMC Shimla indicating high patient load for these tests. For in-patients and emergency patients, both the services were available within one or two days.
- The Radiology department of IGMC Shimla did not have sufficient power backup as two out of four Ultrasonography machines were not working during power outage.
- One 1000 mA (as shown in **Picture 3.20)** and one 800 mA static X-Ray machine, each at IGMC, Shimla and RPGMC, Kangra were found non-functional.

Picture 3.20: Non-functional 1000 mA X-ray machine at IGMC Shimla

In the exit conference (January 2023), the Secretary (Health) stated that to reduce the waiting time for MRI and CT scan services action will be taken for purchase of new machines.

The Government in its reply (January 2024) had stated that a CT scan machine at Dr RPGMC Kangra has been installed and made functional and an MRI machine was likely to be installed. Further, CT Scan machine has been installed at AIMSS Chamiana and it will reduce the waiting time. The proposal for replacement of old MRI machine in IGMC Shimla has been initiated.

3.1.7.2 Availability of Radiology services (Secondary level)

IPHS norms 2012 prescribe radiology services for DHs/CHs (essential ones like X-ray, Dental X-ray and Ultrasonography) and CT scan and Mammography desirable for DHs. In case of CHC, X-ray service should be available. Adequate availability of functional radiology equipment, skilled human resources and consumables are the key requirements for the delivery of quality radiology services.

1. The details of availability of radiology services in all the DHs in the State as of March 2023 are given in **Table 3.32**.

Table 3.32: Availability of radiology services in the DHs

Name of Test/Diagnostic Service	Name of District Hospital											
	Bilaspur	Chamba	Kangra	Kinnaur	Kullu	Hamirpur	Lahaul & Spiti	Shimla	Solan	Sirmaur	Una	Mandi
X-ray	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dental X-ray	✓	✓	✓	×	✓	✓	×	✓	×	✓	✓	✓
Ultrasonography	×	✓	✓	×	✓	✓	✓	✓	✓	✓	×	✓
CT scan	✓	✓	✓	×	✓	✓	×	✓	✓	✓	✓	✓
Barium Swallow, Barium meal, Barium enema, IVP	×	✓	×	×	×	×	×	×	×	✓	×	×
MMR (Chest)	×	×	×	×	×	×	×	×	×	×	×	×
Hysterosalpingo-graphy (HSG)	×	×	✓	×	✓	×	×	×	×	×	×	×

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.32** that:

- X-ray service was available in all DHs in the State.
- Dental X-ray service was available in all DHs in the State except in DH Kinnaur, Lahaul & Spiti and Solan.

- Ultrasonography service was available in all DHs in the State except in DH Bilaspur, Kinnaur and Una.
- CT Scan service was available in all DHs in the State except in DHs Kinnaur and Lahaul & Spiti.
- Barium Swallow, Barium meal, Barium enema and IVP service was available only in DHs Chamba and Sirmaur.
- MMR service was not available in any of the DHs in the State.
- HSG service was available only in DHs Kangra and Kullu in the State.

Among the services checked, most of the services were not available in DH Kinnaur (only X-ray available) followed by DH Lahaul & Spiti (only two of the services available).

2. The details of availability of radiology services in the selected HIs are given in **Table 3.33**.

Table 3.33: Availability of essential Radiology services in selected HIs as on date of audit

HIs	X-ray (essential for CH/CHC)	Dental X-ray (essential for CH)	Ultrasonography (essential for CH)
CH Chango	×	×	×
CH Kandaghat	✓	×	✓
CH Thural	✓	✓	✓
CH Jawalamukhi	✓	×	✓
CH Shahpur	✓	✓	✓
CH Baijnath	✓	✓	✓
CHC Pooh	✓	×	×
CHC Sangla	✓	✓	×
CHC Syri	✓	✓	×
CHC Dharampur	✓	✓	×
CHC Bachhwai	×	×	×
CHC Majheen	×	×	×
CHC Bir	×	✓	×

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.33** that:

- Out of the six selected CHs, X-ray service was available in all CHs except in CH Chango, Dental X-ray service was available in three CHs and Ultrasonography was available in five CHs. Further, regular service was not provided in three CHs[22] due to non-deployment of a regular Radiologist as commented in **Para 2.2.5.4**.
- In CH Thural, it was noticed that a new Ultrasound machine was installed in March 2021. The old Ultrasound machine was lying unutilised, and no action was taken for its transfer to other HIs (June 2022).
- In the seven selected CHCs, Ultrasonography was not available in any of the CHCs, X-ray was available in four out of seven CHCs and Dental X-ray was available in four out

[22] Baijnath, Shahpur, Jawalamukhi

of seven CHCs. In CHC Sangla, Dental X-Ray was received during August 2020, but was not put to use due to non-availability of sensor, laptop and printers.

- None of the services were available in CHCs Bachhwai, Majheen and Bir in Kangra district (except dental X-ray in CHC Bir). Out of the selected 17 PHCs, X-ray service was available only in PHC (Sultanpur).

Thus, due to non-availability of X-ray service in one selected CH, three selected CHCs and 16 selected PHCs; dental X-ray in three DHs, three selected CHs, three selected CHCs, ultrasonography in three DHs, one selected CH and all selected CHCs resulted in denial of radiology services and patients had to go to other HIs for availing the service.

3.1.7.3 Outsourcing of X-ray Lab on PPP mode

An agreement for outsourcing of X-Ray Image based Transmission and Reporting of Radiology Images was executed between MD, NHM and a firm (M/s Krsnaa Diagnostics Pvt Ltd) in May 2018 for all the districts. The services were outsourced for a period of five years i.e. from 17/05/2018 to 16/05/2023 for the entire State.

During audit, it was noticed that outsourcing of X-ray services was done in seven selected HIs[23] during May 2018 to March 2022 even where Radiographers and X-ray machines were available. The Government had to incur extra expenditure for payment of X-ray charges, which could have been avoided. However, it was observed that in places where X-ray services could not be ensured in-house, outsourcing services were not provided as discussed below:

- In CHC Pooh, an X-ray machine was available, but X-ray service was not provided in the hospital as a radiographer was not posted from September 2015 to October 2020 and no outsourcing was done for this period. Patients in this area had to travel to other HIs having X-ray services.
- In CH Chango, an X-Ray machine was available, but neither was a radiographer posted nor was any outsourcing done. Resultantly, no X-ray facility was provided.
- In PHC Spillow and PHC Ribba, X-ray machines were available, but neither were radiographers posted nor was outsourcing done during 2016-21. Resultantly, X-ray facility service was not provided to the patients.

Thus, outsourcing of X-ray services where equipment and manpower was available, resulted in extra burden on the State exchequer. On the other hand, in HIs where equipment was available, the facility was not provided due to non-availability of manpower. In such cases, no outsourcing was done, leading to inconvenience to the patients.

In the exit conference (January 2023), the Secretary (Health) stated that outsourcing of X-ray lab on PPP mode was done due to shortage of radiologists and radiographers. The reply is not tenable as outsourcing services were provided where the resources (equipment and operators) were already available, while HIs without requisite operators were not covered.

[23] DH Kangra, DH Solan, CHC Syri, CH Kandaghat, CH Jawalamukhi, CH Baijnath, CH Shahpur.

3.1.7.4 Pathology services (Tertiary Level)

NMC norms stipulate that there shall be a well-equipped and updated Central Laboratory, preferably along with common collection area for all investigations in histopathology, cytopathology, haematology, immune pathology, microbiology, biochemistry and other specialised work if any. The Central Laboratory should be co-ordinated by one of the related teaching departments of the medical college.

In IGMC, Shimla all the laboratories were not in the same building and were scattered in different places. However, in RPGMC, Kangra all the laboratories were in the same building on different floors. There was a common sample collection centre in both the MCHs.

During joint physical inspection of pathology services conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- In IGMC, Shimla, Widal test for typhoid was not conducted as reagents and kits were not available since September 2021.
- In both the MCHs, the sample collection centre was found to be overcrowded and the waiting space was not sufficient. The patients/attendants were resting on the floors. Drinking water facility was also not available near the sample collection centre in both the MCHs.
- In both the MCHs, records pertaining to calibration of measuring equipment were not found and calibration of equipment was done internally, and no certification was obtained from any external agency.
- Both the MCHs had not established any external assurance system for validation of lab tests. In RPGMC, Kangra, some of the tests like Measles and Rubella were certified from WHO.
- In IGMC, Shimla none of the laboratories had power back-up system. In RPGMC, Kangra, the lab had a centralised power back-up system.
- In IGMC, Shimla, reagent and consumables inside the laboratories were not kept away from direct sunlight and there was dampness and seepage in the store.
- In both the MCHs, no periodic health check-up of staff working in the laboratories was conducted during the period of audit (2016-17 to 2020-21).

3.1.7.5 Pathology services (Secondary Level)

Pathology services are the backbone of any hospital for extending evidence-based healthcare to the public. As in the case of radiology services, availability of essential equipment, reagents and human resources are the main requirements for the delivery of quality pathology services through in-house laboratories.

IPHS norms 2012 prescribe 88 types of pathological investigations required to be carried out in DHs, 48 in CHs and 33 in CHCs in the categories of Clinical pathology, Pathology, Microbiology, Serology, Biochemistry, Cardiology, ENT, Ophthalmology, Endoscopy, and Respiratory.

Availability of pathology services in DHs in the State as of March 2023 is shown in **Table 3.34**.

Table 3.34: Availability of Pathology Services (number of available tests) in DHs in the State (as of March 2023)

Name of Pathology tests (types of Pathological tests)	Bilaspur	Chamba	Kangra	Kinnaur	Kullu	Hamirpur	Lahaul & Spiti	Shimla	Solan	Sirmaur	Una	Mandi
Clinical pathology	4	5	3	3	12	4	4	4	2	5	7	2
Pathology	2	3	1	2	2	11	2	0	0	4	4	1
Microbiology	1	7	1	2	0	4	1	0	3	8	3	1
Serology	3	2	2	0	7	1	3	1	2	2	5	3
Biochemistry	6	7	6	3	20	7	4	5	10	7	11	7
Cardiac Investigation	2	2	1	1	1	3	1	1	1	1	1	1
ENT	1	1	0	0	2	1	0	0	1	2	0	0
Ophthalmology	3	2	3	0	3	3	0	3	3	3	0	3
Endoscopy	0	0	0	0	0	5	0	0	0	0	0	0
Respiratory	0	0	0	0	0	1	0	0	0	0	0	0
Total	**22**	**29**	**17**	**11**	**47**	**40**	**15**	**14**	**22**	**32**	**31**	**18**

Source: Information provided by the Health Institutions.

It can be seen from **Table 3.34** that:

- In all DHs in the State, 11 to 47 pathological investigations were available against the requirement of 88 tests.
- In DH Shimla, Mandi, Kinnaur, Kangra and Lahaul & Spiti available tests were in the range of 11 to 18 whereas in DH Kullu, maximum number of tests were available (47).

Audit noticed that the pathology services in the selected HIs were provided through in-house laboratories.

In five[24] selected CHs, against the norms of 48 tests, 17 to 30 tests were available and in CH Chango only six tests were available. In five[25] selected CHCs, against the norms of 33 tests, 15 to 27 tests were available. In CHC Bachhwai, only two tests were available and in CHC Majheen, no tests were available.

In absence of these pathology tests, patients were forced to visit private labs or higher-level hospitals, where these tests were available, causing increase in out-of-pocket expenses.

In the exit conference (January 2023), the Secretary (Health) stated that Government is planning to increase pathology tests at every level.

3.1.7.6 Quality Assurance of Pathology services (Secondary level)

IPHS norms 2012 stipulated that external validation of laboratory reports was to be done on a regular basis in DHs/CHs/CHCs to ensure that the patients were given accurate reports.

[24] CH Kandaghat -25, CH Thural- 25, CH Jawalamukhi- 17, CH Shahpur- 26 and CH Baijnath- 30.
[25] CHC Pooh-26, CHC Sangla-22, CHC Syri-27, CHC Dharampur-27 and CHC Bir-15.

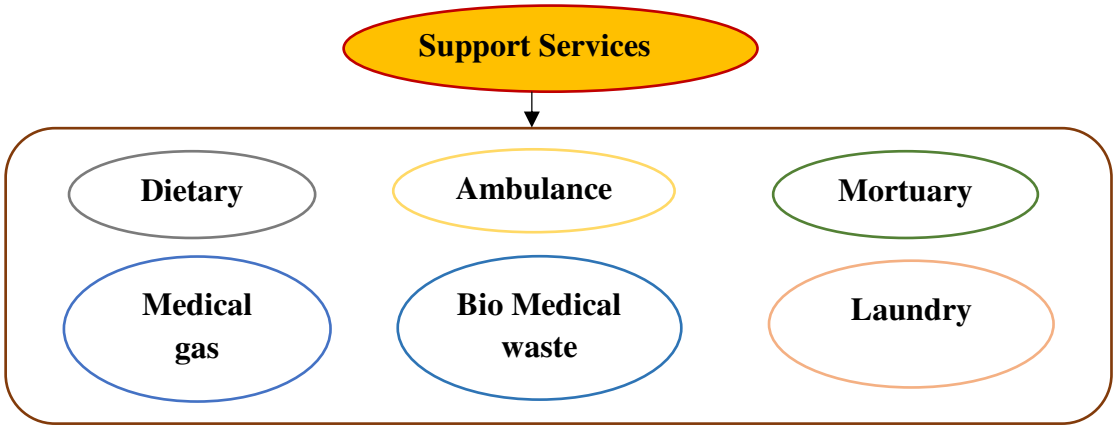
In the selected HIs of three districts, it was noticed that no quality assurance tests were conducted during 2016-21, except in DH Kangra (conducted during 2016-19), DH Kinnaur and CHC Pooh, which had started conducting the tests only from 2020-21.

Hence the quality of the pathological results of the HIs could not be assured.

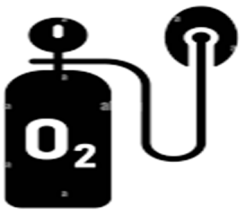
3.2 Availability of Healthcare services - Support services

Support services are the services which are not directly related to patient care but indirectly contribute for providing the levels of service that make a hospital run effectively.

Chart 3.7: Support services in Hospitals



3.2.1 Medical Gas (Oxygen)



Oxygen is an essential element of basic emergency care and is required for surgery and treatment of several respiratory diseases, both chronic and acute. It is used to care for patients at all levels of the healthcare system, including in surgery, trauma, heart failure, asthma, pneumonia and maternal and childcare.

The World Health Organisation (WHO) included oxygen in the WHO Model list of essential medicines (EML) due to its proven lifesaving properties, safety and cost-effectiveness.

3.2.1.1 Medical gas service (Tertiary level)

During joint physical inspection of medical gas services conducted by Audit, it was noticed that:

- Three Oxygen manifolds were installed at the RPGMC, Kangra, with capacity of 208 type-d cylinders. With these manifolds, there was also a liquid oxygen tank with 15,000 kilolitre capacity.
- In RPGMC Kangra, 866 number of beds were available (June 2022), out of which 624 beds (72 *per cent*) were having centralised oxygen connection.
- In addition to the above, the government had made provision to install a Pressurised Swing Absorption (PSA) plant in RPGMC, Kangra, which was not in working condition as commented in **Para 3.4.6.2**.

- In IGMC, Shimla, PSA was not installed due to improper planning as commented in **Para 3.4.6.3**.

3.2.1.2 Medical gas services (Secondary level)

The IPHS norms 2012 also require that OT/ICU/SNCU, etc. should have medical gases in DHs/CHs. In case of CHC, two oxygen IP cylinder should be available.

Audit observed that:

- In all the DHs in the State, medical oxygen service was available as of March 2023.
- In none of the HIs in Kinnaur district, centralised oxygen supply system was installed/functional to ensure uninterrupted oxygen supply. Though in DH Kinnaur, centralised oxygen supply system was installed during 2021-22 (October 2021), the HIs viz. CH Chango, CHC Pooh and CHC Sangla including DH Kinnaur were managing the supply of medical oxygen through portable oxygen cylinders.
- In DH Solan, centralised oxygen supply system was installed during 2018-19. Buffer stock of oxygen cylinder was also available. However, centralised oxygen supply was not available in any of the selected CH and CHCs, and they were managing oxygen requirement through portable oxygen cylinders.
- In DH Kangra, centralised oxygen supply system was installed during 2020-21. Oxygen cylinders were checked on daily and weekly basis and also buffer stock of oxygen was available during 2016-21. However, in the selected four CHs and three CHCs, centralised oxygen supply was not available, and they were managing oxygen requirement through portable oxygen cylinder. In CHC Bachhwai, oxygen cylinders also were not available.

3.2.2 Dietary services

The dietary service of a hospital is an important therapeutic tool. The IPHS norms 2012 for DHs/CHs stipulate that apart from normal diet, the food supplied should be patient specific i.e. diabetic, semi solid and liquid and should be distributed in covered containers. The quality of diet should be checked by a competent person on a regular basis.

As per Kayakalp[26] guidelines, for maintenance of proper hygiene and infection-free environment in the kitchen, there is a minimum requirement of covered trolley for food distribution, separate room for storage, adequate supply of treated water and refrigerators for storage of food items. Further, NHM Assessor's Guidebook envisages that the health facility must have standard procedures for preparation, handling, storage and distribution of food as per the requirement of diet by patients. It is, therefore, imperative that each hospital is equipped with its own in-house kitchen for preparation of meals as per the specific dietary requirements of patients and also for ensuring maintenance of hygiene during cooking.

[26] An initiative launched by Ministry of Health and Family Welfare (MoHFW) under Swachh Bharat Abhiyan to promote cleanliness and enhance the quality of healthcare facilities in India.

3.2.2.1 Dietary Services (Tertiary level)

During joint physical inspection of dietary services at RPGMC, Kangra and IGMC, Shimla against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- In both the selected MCHs, the dietary services were running on outsourced basis.
- In IGMC Shimla, no formal agreement was made between the hospital authorities and the contractor for outsourcing of dietary services.
- In IGMC Shimla, it was noticed that grains and food items were not stored properly and were kept on the floor as shown in **Picture 3.21**.
- The quality of food was never checked by food inspectors at both the MCHs.
- Protective gears like apron, headgear and gloves were not worn by cooking staff at RPGMC, Kangra as shown in **Picture 3.22**.
- No feedback system from patients for quality of diet was available in IGMC Shimla.
- In IGMC, Shimla, the sink in the kitchen was found to be broken and the drain connected to the sink was in choked condition as shown in **Picture 3.23**, creating a foul smell, and rendering the kitchen environment unhygienic.
- Stale food was kept in plastic bags along with the cleaned utensils as shown in **Picture 3.24**.

Picture 3.21: Cooking items were placed on the floor in IGMC, Shimla

Picture 3.22: Showing food being prepared without using gloves, apron and head cover at RPGMC, Kangra

Picture 3.23: Sink in kitchen was found in broken and choked state in IGMC Shimla

Picture 3.24: Left over food was found near the clean utensils in the kitchen of IGMC, Shimla.

3.2.2.2 Dietary services (Secondary Level)

In all the DHs in the State, dietary service was available through outsourcing as of March 2023.

Availability of dietary services in the selected HIs is shown in **Table 3.35**.

Table 3.35: Availability of dietary services in the selected HIs as on date of audit

District	Hospital	Dietary service available (Y/N)	Outsourced/ in-house
Kinnaur	DH Kinnaur	✓	Outsourced
	CH Chango	×	-
	CHC Pooh	×	-
	CHC Sangla	×	-
Solan	DH Solan	✓	Outsourced
	CH Kandaghat	×	-
	CHC Syri	×	-
	CHC Dharampur	×	-
Kangra	DH Kangra	✓	Outsourced
	CH Thural	✓	Outsourced
	CH Jawalamukhi	✓	Outsourced
	CH Shahpur	✓	Outsourced
	CH Baijnath	✓	Outsourced
	CHC Bachhwai	×	-
	CHC Majheen	×	-
	CHC Bir	×	-

Source: Information provided by the Health Institutions.

Audit observed that dietary services were available in all the selected DHs. In the selected CH, only CHs in Kangra district had dietary services, while the services were unavailable in the other selected CHCs. In all the selected HIs where dietary services were available, it was being run on outsourced basis.

During joint physical inspection of dietary services conducted by Audit in HIs where dietary service was available against the checklist of NHM Assessor Guidebook 2013 (DH, CH), it was noticed that:

- Food was being prepared and distributed without apron, head gear and clear plastic gloves in CH Baijnath and CH Thural as shown in **Picture 3.25** and **Picture 3.26**.
- Patient specific diet was provided in all HIs except DH Kinnaur and CH Shahpur.
- The Food Safety and Standards Authority of India (FSSAI) registration certificate issued under Food Safety and Standards Act, 2006 was not available in DH Kangra, CH Thural, CH Baijnath and CH Jawalamukhi.
- Separate storage room was available only in DH Kangra, DH Solan and CH Jawalamukhi.
- Food was not examined by Food Inspector or district authority in any of the selected HIs and the same was done by the ward sister of the concerned HIs.

	
Picture 3.25: Preparing food without apron in CH Baijnath	**Picture 3.26: Preparing food without apron in CH Thural**

In the exit conference (January 2023), the Secretary (Health) stated that food was being checked by the committee of the HIs and there is no system in the department for regular checking of the food quality by the food inspector. The reply is not acceptable as regular checking of food by the competent authority should have been ensured to maintain the food quality in the hospital.

3.2.3 Laundry Services

The provision of clean linen is a fundamental requirement for patient care. Incorrect procedure for handling or processing of linen can present an infection risk, both to staff and patients who subsequently use it. Hence, linen management is important to prevent hospital acquired infections and ensure a hygienic hospital environment. As per NHM Assessor guideline 2013 for DH, the patient's linen including bed sheets and patient gowns need to be changed on a daily basis. Hospitals need to ensure that they have enough stock of linen, readily available for all the areas of the hospital.

3.2.3.1 Laundry Services (Tertiary level)

During joint physical inspection of laundry services conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- In both the MCHs, Shimla and Kangra, linens were changed and sent for washing on alternate days.
- The washing area in both MCHs was very small compared to the linen load and trolley to carry the soiled linen was also not sufficient, as soiled linen was found spread on the ground as shown in **Pictures 3.27** and **Picture 3.28**.
- In both the MCHs, linens were washed using detergent and blood-stained linen were treated before washing in RPGMC Kangra only. However, the persons handling the linen were not using gloves and masks.
- In both the MCHs, provision for checking of Ph level was not available with the laundry supervisor and used water was directly drained out in the municipal drains shown in **Picture 3.29**.
- In RPGMC Kangra, clean linens were stored in open racks and not in closed cupboards.
- In both the MCHs, SOPs for handling, washing and disinfecting linen were not prepared and circulated.

Pictures 3.27 and 3.28: All types of linen put together for washing in IGMC and RPGMC

Picture 3.29: Untreated water after washing led to flow in open drain in IGMC, Shimla

3.2.3.2 Laundry service (Secondary level)

IPHS norms 2012 for DH prescribe different types of linen facilities that are required for patient care services in hospitals such as Abdominal sheets for OT, Bed sheets, Bedspreads, Blankets (Red and Blue), Doctor's overcoats, Draw sheets, Hospital workers' OT coats, Leggings, Mackintosh sheets, Mats (nylon), Mattresses (Foam) for adults, Mortuary sheets, Over-shoe pairs, Paediatric mattresses, Patient's coats (Female), Patient's Pyjamas, Shirts (Male), Towels, Perennial sheets for OT, Pillows, Pillows cover, Apron for cook, Curtains, Uniform/Apron and Table cloths.

IPHS norms 2012 prescribed 24 different types of linen that are required to be provided for patient care services in DHs/CHs while for CHCs, the number of different types of linen is not mentioned in IPHS norms 2012.

In all the DHs in the State, laundry service was available as of March 2023. Details of availability of linens in selected DHs, CHs and CHCs are shown in **Table 3.36**.

Table 3.36: Availability of linen in the selected DHs, CHs and CHCs

Hospital	Laundry service available	Types of linen available against 24 types specified
DH Kinnaur	Yes	15
CH Chango	No	5
CHC Pooh	No	6
CHC Sangla	Yes	4
DH Solan	Yes	15
CH Kandaghat	Yes	9
CHC Syri	Yes	7
CHC Dharampur	Yes	5
DH Kangra	Yes	19
CH Thural	Yes	7
CH Jawalamukhi	Yes	14
CH Shahpur	Yes	7
CH Baijnath	Yes	14
CHC Bachhwai	No	5
CHC Majheen	No	6
CHC Bir	No	1

Source: Information provided by the Health Institutions.

From **Table 3.36**, it can be seen that all the selected HIs except CH Chango and CHC Pooh, CHC Bachhwai, CHC Majheen and CHC Bir had laundry services, which were on outsourced basis. Linen ranging between one to 19 out of 24 types were available with the selected HIs. Thus, there was a shortage of linen in all the selected DHs/CHs.

During joint physical inspection of laundry services conducted by Audit against the checklist of NHM Assessor Guidebook 2013 for DH, CH and CHC, it was noticed that:

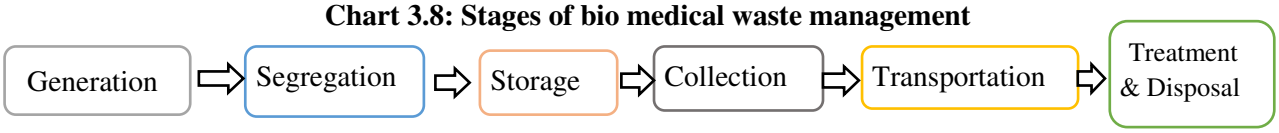
- Laundry register was maintained in all HIs with available laundry service except in CH Kandaghat and CH Jawalamukhi.
- Details of change of bed linen was not regularly entered in the laundry registers of DH Solan, CH Kandaghat, CH Thural, CH Jawalamukhi and CHC Sangla.
- Cleaned linen was kept in closed cupboards and hygienic condition in all HIs except in DH Kinnaur, CH Shahpur and CHC Dharampur.

3.2.4 Bio-medical Waste Management

Bio-medical waste (BMW) is generated during procedures related to diagnosis, treatment and immunisation in the hospitals and its management is an integral part of infection control within the hospital premises. Each HI is to manage/ handle all the BM waste generated in such a way so as to protect health and environment against any adverse effects due to handling of such waste.

The GoI framed Bio-Medical Waste (Management and Handling) Rules, 1998 under Environment (Protection) Act, 1986, which were superseded by Bio-Medical Waste Management Rules, 2016 (BMW Rules). The BMW Rules inter alia stipulate the procedures for collection, handling, transportation, disposal and monitoring of the BMW with clear roles for waste generators and Common Biomedical Waste Treatment Facility (CBMWTF).

Chart 3.8: Stages of bio medical waste management



The BMW Rules require hospitals to segregate different categories of BMW in separate-coloured bins at the source of generation. The waste is to be stored in appropriate colour coded bags at the point of generation and collected by the CBMWTF.

3.2.4.1 Bio-Medical waste (BMW) management (Tertiary level)

During joint physical inspection of BMW management conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- Both the MCHs had engaged operators for collection and disposal of bio-medical waste from the hospital site. Audit observed that segregation of BMW was done at ward/department using colour-coded bins and dumped at a common collection centre. From the common collection centre, BMW was collected and transported to a common disposal plant for further disposal.
- In both MCHs, it was noticed that mixture of BMW was put in a single-color bag.
- HIs are required to establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee. The Committee shall meet once every six months and the record of the minutes of the meetings of this committee shall be submitted along with the annual

report. The Annual report was not uploaded on the websites of both the MCHs. No BMW management committee was formed to review and monitor the bio-medical waste management.

- In both the MCHs, a bar code system was being followed for bags containing bio-medical waste to be sent out of the premises.

Picture 3.30: BMW being segregated before sending it to common collection center at RPGMC, Kangra

Picture 3.31: Dustbin without lid in IGMC, Shimla

Picture 3.32: Common BM waste collection center at IGMC, Shimla.

3.2.4.2 Bio-medical Waste Management (Secondary level)

Various parameters of Bio-medical waste management were checked in DHs and the findings are shown in **Table 3.37**

Table 3.37: Treatment of BMW in selected HIs in all DHs in the State (as of March 2023)

Bio-Medical Waste Management													
Sl. No	**Parameters of biomedical waste management**	**Bilaspur**	**Chamba**	**Kangra**	**Kinnaur**	**Kullu**	**Hamirpur**	**Lahaul & Spiti***	**Shimla**	**Solan**	**Sirmaur**	**Una**	**Mandi**
1	Segregation of BMW at the point of generation in color coded bins	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Collection of bio waste from the DHs by CBMWTF	✓	✓	✓	Disposal through deep burial	✓	✓	Disposal through deep burial	✓	✓	✓	✓	✓
3	Disposal of human anatomical waste and other solid biological waste.	✓	✓	✓	Disposal through deep burial	✓	✓	Disposal through deep burial	✓	✓	✓	✓	✓
4	Disposal of sharps and other hazardous waste	✓	✓	✓	Disposal through sharp pits	✓	✓	Disposal through sharp pits	✓	✓	✓	✓	✓
5	Disposal of liquid waste	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: Information provided by the Health Institutions.

Various parameters as prescribed in Schedule I of BMW Rules 2016, Bio-medical (BM) waste management were checked in the selected HIs and the finding are shown in **Tables 3.38, 3.39** and **3.40**:

Table 3.38: Treatment of BMW in selected HIs in district Kinnaur

Sl. No.	Parameters of biomedical waste management	DH Kinnaur	CH Chango	CHC Pooh	CHC Sangla
1.	Segregation of bio waste at the point of generation in colour coded bins	✓	✓	✓	✓
2.	Collection of bio waste from the DHs by CBMWTF	Disposal done by hospital themselves			
3.	Disposal of human anatomical waste and other solid biological waste.	Deep burial			
4.	Disposal of sharps and other hazardous waste	Deep pit			
5.	Disposal of liquid waste	Discharged in common sewage line of Irrigation & Public Health Department (IPH) after treatment			

Source: Information provided by the Health Institutions.

Table 3.39: Treatment of BMW in selected HIs in district Solan

Sl. No.	Parameters of biomedical waste management	DH Solan	CH Kandaghat	CHC Syri	CHC Dharampur
1.	Segregation of bio waste at the point of generation in colour coded bins	✓	✓	✓	✓
2.	Collection of bio medical waste by CBMWTF	By Operator	By Operator	By Hospital	By Operator
3.	Disposal of human anatomical waste and other solid biological waste.	By Operator	By Operator	Deep burial	By Operator
4.	Disposal of sharps and other hazardous waste	By Operator	By Operator	Deep burial	By Operator
5.	Disposal of liquid Waste	Drained into municipal drain after treatment			

Source: Information provided by the Health Institutions.

Table 3.40: Treatment of BMW in selected HIs in district Kangra

Sl. No.	Parameters of biomedical waste management	DH Kangra	CH Thural	CH Jawalamukhi	CH Shahpur	CH Baijnath	CHC Bachhwai	CHC Majheen	CHC Bir
1.	Segregation of bio waste at the point of generation in colour bins	✓	✓	✓	✓	✓	✓	✓	✓
2.	Collection of bio waste from the DHs by CBMWTF	Alternate days by operator	Thrice a week by operator	Alternate days by operator	Alternate days by operator	Thrice a week by operator	Thrice a week by operator	Thrice a week by operator	Thrice a week by operator
3.	Disposal of human anatomical waste and other solid biological waste	By operator	By operator	By operator	By operator	By operator	Deep burial	By operator	By operator
4.	Disposal of sharps and other hazardous waste	By operator	By operator	By operator	By operator	By operator	Deep pit	By operator	By operator
5.	Disposal of liquid waste	Discharged in common sewage line of IPH after treatment							

Source: Information provided by the Health Institutions.

Bio-medical Waste Rules mandate segregation of the waste at source and its pre-treatment or neutralisation prior to mixing with other effluents generated from healthcare facilities. Audit noticed that the segregation of BM waste was being done in different colour coded bins in all the selected DHs, CHs and CHCs.

Audit observed that in DH Solan, CH Kandaghat and CHC Dharampur that BMW storage room was in a bad state which may increase the chances of animal access, spreading bacteria/ viruses, polluting the environment etc. as shown in **Pictures 3.33** to **3.35**. Storage was done in temporary sheds.

		
Picture 3.33: Temporary arrangement for BMW in Kandaghat	**Picture 3.34: BMW storage in DH Solan**	**Picture 3.35: BMW storage in CHC Dharampur**

During joint physical inspection of BMW management conducted by Audit against the checklist of NHM Assessor Guidebook 2013 for DH, CH and CHC, it was noticed that:

- In none of the selected HIs, Effluent Treatment Plant (ETPs) were established for pre-treatment of the liquid chemical waste, resulting in drainage of the waste directly into the sewerage system. This was not only a violation of the BMW Rules but was also hazardous to public health.
- In all the selected HIs (DHs and CHs), protective gear/equipment were provided to health workers.
- In all the selected DHs, health check-ups were conducted every six months and immunisation of workers involved in BMW handling also ensured. In two[27] out of six selected CHs, health check-ups were conducted annually, and immunisation of workers involved in BMW was also ensured.

3.2.4.3 Non-installation of STPs

A Memorandum of Understanding was signed between Director, Health Services (DHS), Himachal Pradesh and two agencies[28] in March 2020 for design engineering, construction, supply, installation, testing, erection, commissioning and maintenance (five years after commissioning) of Sewage Treatment Plant (STP) of various capacities in the HIs of Himachal Pradesh. The stipulated period for completion of the project was 12 months (27/03/2021) from the project commencement date i.e. 27/03/2020.

Information regarding status of installation of STPs for the State is shown in **Table 3.41**.

[27] CH Shahpur and CH Baijnath.
[28] M/s Anushka Builders and Colonizer, Aliganj, Lucknow and M/s Bansal Construction company.

Table 3.41: Status of installation of STPs

(₹ in lakh)

District	No of STP to be installed	Payment released	No. of STP installed	Status of installation as of
Bilaspur	3	80.65	3	Plant installed; commissioning awaited as of November 2021.
Chamba	5	87.96	0	STP plant has reached at institute and installation is under process in CH Dalhousie, CH Chowari. Plant at CH Tissa, CH Killar and CHC Sahoo not supplied in the HI (November 2021).
Hamirpur	4	10.16	0	Only 5 *per cent* payment released (December 2021)
Kangra	17	469.66	17	Not commissioned (November 2021).
Kinnaur	5	43.50	0	Not installed, machine plant received (November 2021).
Kullu	4	24.50	3	Installed in three HIs but not yet commissioned (November 2021)
L&S	4	44.12	0	Under installation (November 2021)
Mandi	9	173.91	6	Installation done in six HIs and commissioning was pending and in three HIs namely CH Bagsaid, Kotli and Dharampur, site selection of STP was pending (November 2021)
Shimla	9	165.21	9	Not commissioned (November 2021)
Sirmaur	2	16.22	1	One at the stage of installation and one at the stage of commissioning (November 2021)
Solan	1	22.75	1	Installed but not commissioned (November 2021)
Una	6	70.85	4	Not supplied by the firm at CHC Basdehra and Santoshgarh and remaining four HIs installed but not functional as of November 2021
Total	**69**	**1209.49**	**44**	

Source: CMO records

Further, on test-check of records in the selected districts, it was noticed that none of the 23 proposed STPs (stipulated commissioning date of March 2021) were commissioned till the date of field visit by Audit (October 2021 to April 2022). Details of the STPs are given in **Table 3.42**.

Table 3.42: Details of STPs in the selected districts

Name of the District	Name of the firm	No of STPs to be installed	Date of agreement	Cost of the project (₹ lakh)	Scheduled date of completion	Status of installation as of	Remarks
Kinnaur	M/s Bansal Constructions company	5	17/03/2020	145.00	27/03/2021	October 2021	Not commissioned
Kangra		7	17/03/2020	239.00	27/03/2021	November 2021	
Kangra	M/s Anushka Builders and Coloniser	10	17/03/2020	600.78	27/03/2021	November 2021	
Solan		1	17/03/2020	35.00	27/03/2021	January 2022	
Total		**23**		**1019.78**			

Source: CMO records

It can be seen from **Table 3.42** that the firms failed to commission the STPs even after 19 to 22 months after the scheduled date of completion of the project. The firms have procured and transported the STP material at site, which was lying unutilised as shown in **Pictures 3.36** and **3.37** at CHC Sangla and CH Chango (October 2021).


Pictures 3.36 and 3.37: STP material lying unutilised in CHC Sangla and CH Chango

Pictures of incomplete STPs during joint physical verification conducted by Audit at Jawalamukhi (February 2022), Shahpur (March 2022), CH Thural (January 2022) are as below.

Picture 3.38: STP material in CH Thural, January 2022

Picture 3.39: STP material in CH Jawalamukhi, February 2022

Picture 3.40: STP material in CH, Shahpur, March 2022

Thus, 44 out of 69 STPs were installed as of November 2021 as indicated in **Table 3.41** but none of the STPs were commissioned resulting in non-functioning of the STPs and disposal of sewerage without treatment.

3.2.4.4 Training for management of Bio-Medical Waste

As per the BMW Rules, it is the responsibility of the healthcare facilities to ensure that all the staff handling BMW are provided regular training on BMW handling. Training provided in the selected districts is shown in **Tables 3.43, 3.44** and **3.45**.

Table 3.43: Details of training provided to by hospitals in district Kinnaur (Number of people)

Year	DH Kinnaur	CH Chango	CHC Pooh	CHC Sangla
2016-17	60	No training imparted	17	No training imparted
2017-18	40	No training imparted	10	No training imparted
2018-19	28	No training imparted	9	11
2019-20	66	No training imparted	8	No training imparted
2020-21	25	1	9	No training imparted

Source: Information provided by the Health Institutions.

Table 3.44: Details of training provided by hospitals in district Solan (Number of people)

Year	DH Solan	CH Kandaghat	CHC Syri	CHC Dharampur
2016-17	Records not available	0	1	0
2017-18	Records not available	0	3	5
2018-19	Records not available	0	6	5
2019-20	Records not available	0	6	6
2020-21	1	0	38	23

Source: Information provided by the Health Institutions.

Table 3.45: Details of training provided by hospitals in district Kangra (Number of people)

Year	DH Kangra	CH Thural	CH Jawalamukhi	CH Shahpur	CH Baijnath	CHCs Majheen	CHC Bachhwai	CHC Bir
2016-17	21	No training imparted		928	No training imparted			
2017-18	78			338				
2018-19	50			1020	2	No training imparted		
2019-20	48			127	No training imparted	10	No training imparted	
2020-21	No training imparted			240	No Training imparted			

Source: Information provided by the Health Institutions.

Audit observed the following in the selected districts:

- In DH Kinnaur, regular training on BMW handling was provided to the staff. In CH Chango, no training was provided during 2016-20 and in case of CHCs, training was provided in CHC Pooh (2016-20), while in CHC Sangla, training was provided only in 2018-19. At the level of PHCs, training was provided in eight[29] out of the 17 selected PHCs.
- In DH Solan, records were not available for 2016-20. In CHC Dharampur and CHC Syri, training was provided regularly. In CH Kandaghat, training was not provided.
- In Kangra district, in DH Kangra and CH Shahpur, regular trainings were provided to staff who were handling BMW.

Thus, due to lack of training, health hazards for the staff handling the BMW in the test-checked hospitals and improper disposal of the BMW could not be ruled out.

3.2.5 Ambulance services

IPHS norms 2012 specify the number of ambulances required for each hospital according to the number of beds. Further, IPHS norms 2012, envisage that the ambulances should be provided with basic life support/ advanced life support equipment and communication system. There shall be a dedicated parking space separately for ambulances near emergency. Serviceability and availability of equipment and drugs in ambulance are required to be checked on a daily basis.

3.2.5.1 Availability of Ambulance 108 in the State

Due to geographical conditions and tough terrain, Himachal Pradesh has one of the highest accident rates in the country. Many lives are lost, and people suffer disabilities due to lack of timely medical care including those for pregnant women, infants and persons in acute emergencies like stroke, heart attack, poisoning, burn and snake bites.

In view of the above, the State started an Emergency Response System through Public Private Partnership (PPP) mode in 2010. Presently these services are running through tender

[29] Chamia, Ribba, Spillow, Rakchham, Bandian Khopa, Seon, Charri and Ghallaur

process. The ambulances provide free transportation to persons requiring immediate medical care and all pregnant women and sick children. This service can be availed through a Toll-Free Number 108 and is available round the clock and free of cost to all people. A total of 248 ambulances (35 Advance Life Support[30] (ALS) and 213 Basic Life Support[31] (BLS)) are now on road as of March 2023. Out of these, 35 ambulances are dedicated for providing IFT (inter facility transfer), which exclusively cater to referred patients from one hospital to another and are placed at strategically located hospitals. In order to enhance the response time in the urban areas of Himachal Pradesh, six Bike Ambulances[32] as first responder have been initiated by the State. Two Bike Ambulances were started in Shimla town during April 2018 and four more Bike Ambulances, two each for Mandi and Dharamshala, have been flagged off during October 2020. The average response time in urban areas was in the range of 10.49 to 15.50 minutes and in rural areas it was in the range of 30.35 to 38.23 minutes during 2016-23. Audit could not ascertain whether this was within the response time prescribed as per the MoU[33], because in the MoU, the response time has been prescribed region-wise, rural and urban area-wise (low, middle and upper hills), whereas the data provided by the department is rural and urban area-wise for the whole state.

3.2.5.2 Janani Shishu Suraksha Karyakaram (102) Ambulance services in the State

The State has launched JSSK Drop back[34] (102) ambulance service with a total fleet of 125 vehicles. Under this scheme, 125 ambulances would provide facility to pregnant women after delivery and for sick children up to the age of one year. As per the data available in the National Health Mission website of Himachal Pradesh, as of December 2021, 3.01 lakh beneficiaries had availed the ambulance service in the State.

3.2.5.3 Ambulance service (Secondary level)

IPHS norms 2012 prescribe that every DH should have three ambulances if the bed strength is more than 100. In all the DHs in the State, ambulance service was available as of March 2023. In case of CH, for 31-50 beds one ambulance is prescribed. In the case of CHCs, round the clock ambulance service with basic life support should be available. It is also desirable to have an ambulance in PHCs to provide emergency services.

Requirement and availability of ambulances as per IPHS norms 2012, in the selected districts is shown in **Table 3.46**.

Table 3.46: Requirement and availability of ambulances as on date of audit

District	Type of facility	Requirement as per IPHS norms	Available
Kinnaur	DH Kinnaur	3	6
	CH Chango	1	1
	CHC Pooh	1	1

[30] The advanced life support ambulance is equipped with cardiac life support, cardiac monitors as well as a glucose-testing device. The ALS ambulance also carries medications onboard.

[31] Basic life support ambulance is for patients who have lower extremity fractures, patients transferred to sub-acute care facilities or who are discharged to home care, psychiatric patients, and other non-emergency medical transportation.

[32] To allow first responders to reach the spot of the emergency as quickly as possible.

[33] MoU with GVK EMRI – November 2016 – January 2022, MoU with MEDSWAN FOUNDATION – February 2022 onwards

[34] Free drop back from Institutions to home.

District	Type of facility	Requirement as per IPHS norms	Available
	CHC Sangla	1	1
Solan	DH Solan	3	3
	CH Kandaghat	1	2
	CHC Syri	1	1
	CHC Dharampur	1	2
Kangra	DH Kangra	3	2
	CH Thural	2	0
	CH Jawalamukhi	2	0
	CH Shahpur	2	1
	CH Baijnath	2	2
	CHC Majheen	1	0
	CHC Bir	1	0
	CHC Bachhwai	1	0

Source: IPHS norms and Information provided by the HIs

From **Table 3.46** it can be seen that there were adequate ambulances in the selected HIs except CH Thural, CH Jawalamukhi, CHC Majheen, CHC Bachhwai and CHC Bir where no ambulances were available, and patients had to arrange vehicles by themselves in case of emergency.

During joint physical inspection of ambulance service conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH, CH and CHC), it was noticed that:

- All the ambulances available in the selected HIs were running with Basic Life Support (BLS), however, none were equipped with Advance Life Support (ALS).
- None of the ambulances were equipped with essential equipment[35] except DH Kangra. Essential drugs were only available in ambulances of DH Kangra and CH Baijnath.
- All the ambulances except 108 were running without technician.
- Oxygen cylinders were available in all the ambulances except in CH Shahpur and CH Kandaghat.
- Serviceability and availability of equipment and drugs were not checked on daily basis.
- In CHC Pooh, there was one BLS ambulance which was not in running condition since August 2014. In CHC Sangla, permanent driver was not available and in case of emergency, a driver attached with the BMO was sent for ambulance duty.

In the exit conference (January 2023), the Secretary (Health) stated that almost all the ambulances had been replaced with the 108 ambulances service in which technicians were available.

The reply was not acceptable as departmental ambulances available in the selected HIs were running without technician.

3.2.6 Mortuary Services

Mortuary Services provides facilities for keeping dead bodies and conducting autopsy. The mortuary shall be located in a separate building near the pathology on the ground floor, easily accessible from the wards,

[35] Suction Pump, Laryngoscope, Bag and Mask Ventilation Device, BP Instrument Aneroid, Cervical Collar, Portable hand-held Glucometer, First Aid Box etc.

accident and emergency department and operation theatre. It shall be located away from general traffic routes used by public. Post-mortem room shall have stainless steel autopsy table with sink, a sink with running water for specimen washing and cleaning and cupboard for keeping instruments.

Proper illumination and air conditioning shall be provided in the postmortem room. A separate room for body storage shall be provided with at least two deep freezers for preserving the body. There shall be a waiting area for relatives and a space for religious rites.

3.2.6.1 Mortuary Services (Tertiary level)

The following was observed in the MCHs:

- Mortuary rooms were available 24X7 in both the MCHs.
- Three deep freezers with total 10 compartments were available in RPGMC, Kangra. In IGMC, Shimla one deep freezer with six compartments was available.
- In IGMC, no Standard Operating Procedure (SOP) was adopted to clean the mortuary room as they were cleaned by the same method as other hospital rooms were cleaned.
- In both MCHs, post-mortem services were available in the hospital and were connected with the mortuary room.
- Mortuary van was available only in RPGMC Kangra.

3.2.6.2 Mortuary Services (Secondary level)

In all the DHs in the State, mortuary service was available as of March 2023.

During joint physical inspection of mortuary services in the selected districts conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

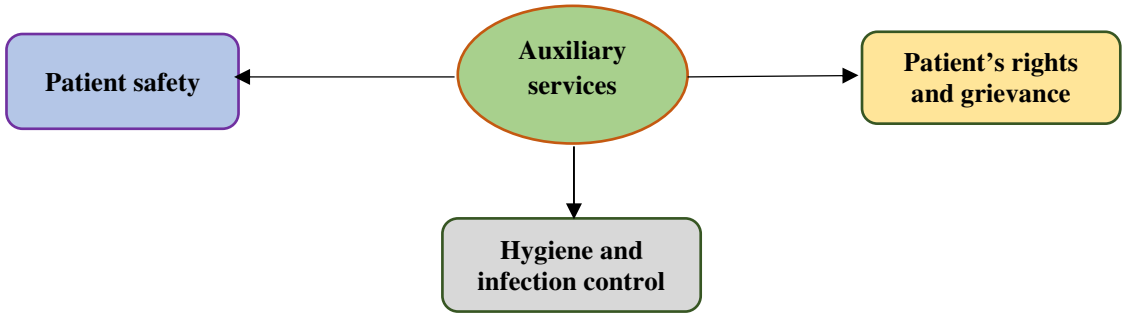
- Mortuary services were available only in selected DHs and not in the selected CHs and CHCs.
- In all selected DHs, mortuary services were available 24x7 and appropriately located (with functional linkage with hospital emergency, OT, IPD etc.) as provided in Assessor Guidebook 2013.
- Mortuary facility had proper illumination and air conditioning in post-mortem rooms in all the selected DHs except DH Kangra where air conditioning was not available.
- In DH Kangra, post-mortem rooms had stainless steel autopsy table with sink, a sink with running water for specimen washing and cleaning and cupboard for keeping instruments and in DH Solan, Marble table with sink was available. Whereas in DH Kinnaur table was not available.
- Separate room for body storage was provided with deep freezers for preserving the body and a system to categorise the dead bodies before preservation was available. Also, in the mortuary, there was provision for storage of unclaimed bodies for fixed period in all the selected DHs.
- Mortuary van was available in DH Kinnaur but not in DH Solan and Kangra.

- Facility of pathological post-mortem was not available in any of the DHs.
- Adequate firefighting equipment was available in the selected DHs except in DH Kinnaur.
- All bodies sent to the mortuary were accompanied with copy of death certificate issued by hospital in the selected DHs.
- Dedicated room for staff was available in the selected DHs except in DH Kinnaur.

3.3 Availability of Healthcare Services - Auxiliary services

Auxiliary services in a hospital are of utmost importance since they are required to ensure a comfortable and nurturing environment for all, thereby contributing their part for the effective care and treatment of patients. The hospital auxiliary services include patients' safety, patients' rights and grievance redressal and hygiene and infection control as shown in **Chart 3.9**.

Chart 3.9: Auxiliary services



3.3.1 Patient Safety

As per Department of Health & Family Welfare, Himachal Pradesh, the main purpose of the disaster management plan is to mainstream disaster prevention, mitigation, preparedness and response activities into the health sector, with specific focus on hospitals; such that hospitals are not just better prepared but fully functional immediately after disasters and are able to respond without any delay to the medical requirements of the affected community.

3.3.1.1 Fire Safety (Tertiary level)

National Building Code of India 2016, Part-4 - Fire and Life safety require that fire extinguishers must be installed in every hospital, so that in case of any fire in the hospital premises, the safety of the patients/attendants/visitors and the hospital staff may be ensured.

- In IGMC, Shimla, Audit noticed that the last inspection was carried out by Station Fire Officer, Fire station, Shimla, during December 2021. The fire department recommended for compliance with their report, but no action in this regard was taken by the MCH management.
- In both MCHs, fire-fighting equipment like smoke detector, fire alarm, fire extinguishers and fire hydrants were available. However, NOC from the Fire Department was not obtained.

3.3.1.2 Fire Safety (Secondary level)

Minimum requirements for a reasonable degree of safety from fire emergencies in hospitals must be met such that the probability of injury and loss of life from the effects of fire are reduced. In this regard, measures shall be taken to limit the development and spread of fire by providing appropriate arrangements within the hospital through adequate staffing and careful development of operative and maintenance procedures consisting of design and construction, provision of detection, alarm and fire extinguishers, fire prevention, planning and training programmes for isolation of fire and transfer of occupants to a place of comparative safety or evacuation of the occupants to achieve ultimate safety.

Audit observed that none of the selected HIs had obtained NOC from the Fire Department.

The details of availability of fire extinguishers and other items in the selected HIs during 2016-21 are shown in **Tables 3.47** to **3.49**.

Table 3.47: Details of availability of fire equipment in district Kinnaur

Equipment	DH Kinnaur	CH Chango	CHC Pooh	CHC Sangla
Smoke detector	×	×	×	×
Fire alarm	×	×	×	×
Fire extinguisher	✓(65)	×	✓ (2)	✓ (6)
Fire hydrant	✓ (3)	×	×	×
Sand bucket	×	×	×	×
Underground backup water	×	×	×	×
Signage for fire exit	✓	×	✓	×
Emergency door	×	×	×	✓

Source: Information provided by the Health Institutions.

Table 3.48: Details of availability of fire equipment in district Solan

Equipment	DH Solan	CH Kandaghat	CHC Syri	CHC Dharampur
Smoke detector	×	×	×	×
Fire alarm	×	×	×	×
Fire extinguisher	✓(44)	✓ (10)	✓ (28)	✓ (5)
Fire hydrant	×	×	×	×
Sand bucket	✓	×	×	×
Underground backup water	×	×	✓	×
Signage for fire exit	✓	×	×	✓
Emergency door	✓	×	✓	×

Source: Information provided by the Health Institutions.

Table 3.49: Details of availability of fire equipment in district Kangra

Equipment	DH Kangra	CH Thural	CH Jawalamukhi	CH Shahpur	CH Baijnath	CHCs Bachhwai	CHC Majheen	CHC Bir
Smoke detector	×	×	×	×	×	×	×	×
Fire alarm	✓(1)	×	×	×	×	×	×	×
Fire extinguisher	✓(36)	✓ (17)	✓ (11)	✓ (6)	✓(34)	✓(4)	✓(5)	✓(2)
Fire hydrant	×	×	×	×	×	×	×	×
Sand bucket	×	×	×	×	×	×	×	✓
Underground backup water	×	×	×	✓	×	×	×	×
Signage for fire exit	✓	×	×	×	✓	×	×	✓
Emergency door	✓	×	×	×	✓	×	×	×

Source: Information provided by the Health Institutions.

As can be seen from **Tables 3.47** to **3.49**, smoke detectors and fire alarms were not available in any of the selected HIs except in DH Kangra, where one fire alarm was available. Fire extinguishers were available in all selected HIs except CH Chango. Although fire extinguishers were available, training was not imparted to staff to operate the fire extinguishers.

As per the hospital safety guidelines for firefighting, the underground static water tank should remain full at all times to meet any contingency. However, in the selected HIs, the underground static water tank was not constructed for meeting the fire contingency except in CHC Syri and CH Shahpur.

Emergency doors for early exit from the building were available only in DH Kangra, DH Solan, CH Baijnath, CHC Syri and CHC Bir. Fire hydrants intended to provide water to the firemen were not installed in any of the selected HIs, except in DH Kinnaur.

3.3.1.3 Periodic fire safety audit (Secondary level)

Himachal Pradesh Fire Fighting Service Act, 1984 prescribes standards in respect of safety from fire in buildings.

- Sr. Medical Superintendent DH Kangra requested (December 2020) the Fire Officer, Dharamshala for inspection of the DH for the purpose of fire safety. The Fire Officer (January 2021) Dharamshala recommended that installation of fire equipment may be done in the hospital. Audit scrutiny revealed that the matter was taken up with the DHS (January 2021) and it was intimated that NOC from the Fire Department had not been obtained due to deficiency in the fire safety norms. The deficiencies pointed out by the Fire Department were not complied with, in the absence of which NOC was not granted by the Fire Department. The fire safety audit was not conducted during the period 2016-21. Therefore, safety of the patients/attendants/visitors and the hospital staff was not ensured.

- In DH Solan, fire audit was carried out by Directorate of Fire Services during January 2016, and the Fire Department suggested for installation of fire safety equipment but due to non-provision of funds, fire safety equipment was not installed in the hospital (January 2022). No fire audit was conducted during 2016-21 thereby compromising the safety of the patients/attendants/visitors and the hospital staff.

- In DH Kinnaur, no fire audit was carried out by the Fire Department during 2016-21.

3.3.1.4 Patient safety measures (Secondary level)

As per the IPHS norms 2012, DHs/CHs shall have a dedicated Hospital Management Policy and should emphasise on hospital buildings with earthquake proof and fire protection features. Infrastructure should be eco-friendly and disabled (physically and visually handicapped) friendly. Local agency guidelines and bylaws should be strictly followed. In case of CHC, building structure and the internal structure should be made disaster-proof especially earthquake proof, flood proof and equipped with fire protection measures.

Audit noticed that none of the selected HI buildings were constructed after taking earthquake safety into consideration.

As per the State Disaster Management action plan for the State of Himachal Pradesh, the State plan should streamline with the overall health policy and health plan to address the preventive, mitigation and response plan in event of a disaster.

During audit and joint physical inspection of the selected HIs, it was noticed that seven[36] out of 16 selected HIs had neither prepared plans nor standard operating procedures (SOP) to manage disasters in order to avoid casualty incidents during 2016-21. The hospitals, therefore, failed to prepare themselves in advance for expected and unexpected threats, to minimise the risk.

3.3.2 Patient rights and grievance redressal

Citizen Charter shall be displayed at the OPD and at the entrance in local language including patient rights and responsibilities. It indicates the standards of quality and minimum assured services provided by the hospital. Further, for effective redressal of grievances of patients, there shall be provision of complaints/suggestion box in the hospital and a grievance redressal committee for monitoring the grievances, to settle genuine complaints in a time bound manner.

As per IPHS norms 2012, Citizen Charter should be displayed at a proper place in the hospitals so that the patients are aware of their rights, the services available, user fees charged, if any, and a grievance redressal system to redress the complaints of the occupants of the hospital. The availability of Citizen Charter in the selected hospitals is shown in **Table 3.50**.

Table 3.50: Availability of citizen charter in selected hospital as on date of audit

District	Hospitals	Availability of Citizen Charter	Available in local language
Kinnaur	DH Kinnaur	✓	×
	CH Chango	×	×
	CHC Pooh	✓	✓
	CHC Sangla	✓	✓
Kangra	DH Kangra	✓	✓
	CH Thural	✓	×
	CH Jawalamukhi	×	×
	CH Shahpur	×	×
	CH Baijnath	✓	✓
	CHC Bachhwai	✓	×
	CHC Majheen	✓	✓
	CHC Bir	✓	✓
Solan	DH Solan	✓	×
	CH Kandaghat	×	×
	CHC Syri	✓	✓
	CHC Dharampur	×	×

Source: Information provided by the Health Institutions.

[36] CH Chango, Kandaghat, Thural, Jawalamukhi, CHC Dharampur, Syri and Bachhwai

It can be seen from **Table 3.50** that Citizen Charters were available in 11 out of 16 selected HIs.

During joint physical inspection conducted by Audit, it was noticed that:

- Citizen Charters were available in 11 out of 16 selected HIs and out of these Citizen Charters was in local language in seven selected HIs.
- Complaint boxes or complaint registers were maintained in six[37] out of the 16 selected HIs.
- Timings/ working hours of OPD and other services were displayed in 13 out of the 16 selected HIs except in CH Jawalamukhi, CHC Syri and CHC Bachhwai.
- Patient's grievance redressal committees were not constituted in 13 out of the 16 selected HIs (except CH Shahpur, CHC Pooh and CHC Syri).

Absence of Citizen Charters in local language deprived the patients from obtaining information related to patient's rights and responsibilities. Non-availability of complaint box and patient grievance redressal committee indicated a casual attitude towards patient's issues.

3.3.3 Hygiene & Infection control

As per Indian Council of Medical Research (ICMR) Infection Control Guidelines, the emergence of life-threatening infections such as severe acute respiratory syndrome and re-emerging infectious diseases have highlighted the need for efficient infection control programmes in all healthcare settings.

3.3.3.1 Hygiene and Infection control in Tertiary level hospitals

Hygiene and Infection Control Committee (HICC) was established in IGMC, Shimla and the present committee was constituted in May 2020, and it does not have any fixed tenure. In RPGMC, Kangra, Microbiology Laboratory collects surface and environment samples on a periodical basis from all over the hospital for infection control.

During joint physical inspection of hygiene and infection control conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH), it was noticed that:

- In IGMC Shimla, for creating awareness about infection control measures, posters in the wards of hospital were not fully displayed and were found only at a few places.
- In IGMC Shimla, regular rounds of inspection in the hospital were made by the HICC and teaching sessions to sensitise different categories of the staff were also held at regular intervals. During joint physical verification of toilets and hand washing areas, it was observed that no liquid soaps were kept.
- In IGMC Shimla, drinking water was not available in all wards and was available in a few IPD wards.

[37] DH Kangra, CH Shahpur, CHC Pooh, CHC Sangla, CHC Majheen and CHC Bir.

- In IGMC Shimla, no surface and environment samples of laboratories were taken as required by Assessor Guidebook for Quality Assurance in DHs. During physical inspection of Skin OPD, Medicine OPD, Surgery OPD, Eye OPD and Emergency ward, it was noticed that the quality of the air was not satisfactory, and rooms lacked proper ventilation. The windows were not fitted with grills and could not be opened due to the menace of monkeys, thereby obstructing cross-ventilation. Few of the air samples of different years were checked and it was noticed that the air quality on 16/06/2022 of emergency OT room No.2 (surgery) and main OT No.5 (ENT) were found to be unsatisfactory. The bacterial count on 03/01/2019 in Respiratory Intensive Care Unit (RICU) was 524. Generally bacterial count less than 180 CFU/m3 is acceptable and satisfactory.
- In IGMC Shimla, untreated hospital waste was released into the common municipal sewers as shown in **Pictures 3.41** and **3.42**.


Pictures 3.41 and 3.42: Untreated wastewater let in public drain in IGMC

- During physical verification, it was observed that hospital waste that was kept in hospital premises was not collected by the Shimla Municipal Corporation as shown in **Pictures 3.43** and **3.44**.


Picture 3.43 and 3.44: Dumped materials / waste found inside the IGMC hospital campus not collected by SMC.

- During scrutiny of records, it was noticed that proposal for the construction of effluent treatment plants at various buildings at IGMC was made during December 2021 but the administrative approval and expenditure sanction had not been accorded by the competent authority (June 2022).

The authorities stated that air samples were taken in both MCHs for quality testing by microbiology department on a periodic basis.

3.3.3.2 Hygiene & Infection control in HIs (Secondary Level)

Guidelines issued by National Centre for Disease Control, Ministry of Health and Family Welfare, GoI, stipulate that Hospital Infection Control Policies are needed to be framed, practiced and monitored by Hospital Infection Control Team (HICT) and Hospital Infection Control Committee (HICC) in each hospital.

Audit noticed that in 12 out of 16[38] selected HIs, HICCs were formed. First prize of Kayakalp award was received by DH Kinnaur during 2016-17 and 2020-21 for cleanliness in the hospital. Similarly, during 2019-20, DH Kangra was awarded with Kayakalp award of ₹ 25.00 lakh. During the year 2021-22, DH Kangra was awarded quality certification under National Quality Assurance Standard (NQAS) & Labour room Quality initiative (LaQshya) programme, which is the only hospital to get such an award in the State.

HICC is to monitor the hygiene standards periodically and various methods are to be adopted to minimise air-borne infections. Regular air samples are to be taken and its microbiological surveillance reports are to be analysed.

During joint physical inspection of hygiene and infection control conducted by Audit against the checklist of NHM Assessor Guidebook 2013 (DH, CH and CHC), it was noticed that:

- Air samples were not taken in any of the selected HIs except DH Solan. In absence of this, the quality of air in the selected HIs could not be ensured.
- Biological testing of water was only conducted in DH Kangra, DH Solan and CH Chango. In the remaining CHs, CHCs and PHCs, biological testing of water was not conducted.
- Water tanks were not cleaned in two[39] CHs and CHC Syri.
- SOP for infection control was available in 13 out of 16 HIs except CH Chango, CH Kandaghat and CH Jawalamukhi.
- Rodent control was done in all DHs and three CHCs (Sangla, Dharampur and Bir). Pest control was conducted in all the selected DHs, CH Shahpur and CHC Bir.

3.4 Emergency Management

Coronavirus disease 2019 (COVID-19) is a contagious disease caused by a virus, the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The COVID-19 virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. These particles range from larger respiratory droplets to smaller aerosols. Most common symptoms include fever, cough, tiredness and loss of taste or smell. In Himachal Pradesh, the first case of COVID-19 was recorded on 21 March 2020.

3.4.1 Funding for Covid-19 in the State

The Government of India provided funds under Emergency COVID Response Package (ECRP) to the State to support preparedness and prevention related activities due to the

[38] All except CH Kandaghat, CH Jawalamukhi, CHC Majheen and Bachhwai.
[39] CH Thural and CH Jawalamukhi.

COVID-19 outbreak. ECRP was intended to build resilient health systems to support preparedness and prevention related functions that would address not only the current COVID-19 outbreak but also such outbreaks in future.

3.4.2 Emergency Covid Response Package – I (ECRP-I)

The State Government prepared the ECRP of ₹ 18.81 crore for 2019-20, ₹ 52.77 crore for 2020-21 and ₹ 43.16 crore for 2021-22. During 2020-21 and 2021-22, ₹ 59.41 crore and ₹ 43.16 crore respectively was spent by the NHM under COVID-19. The amount was spent for diagnostics (including Sample Transport), Drugs and Supplies, HR etc. Details of expenditure is shown in **Table 3.51**.

Table 3.51: Details of expenditure during 2020-22 under ECRP-I

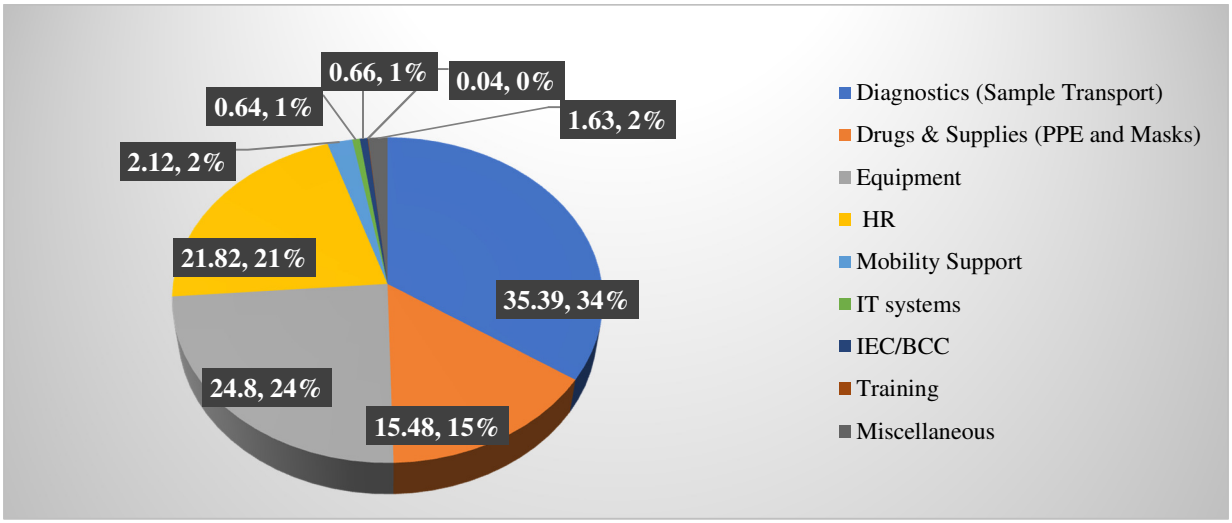
(₹ in crore)

Sl. No.	Type of expenditure	Expenditure incurred in 2020-21	Expenditure incurred in 2021-22	Total
1.	Diagnostics including Sample Transport	18.18	17.21	35.39
2.	Drugs and Supplies including PPE and Masks	11.88	3.60	15.48
3.	Equipment\facilities for patient care including support for ventilators etc.	10.77	14.03	24.8
4.	HR	14.06	7.76	21.82
5.	Mobility Support	1.83	0.29	2.12
6.	IT systems including Hardware and Software etc.	0.64	0	0.64
7.	IEC/BCC	0.64	0.02	0.66
8.	Training	0.04	0	0.04
9.	Miscellaneous (which could not be accounted for above items of expenditure)	1.38	0.25	1.63
Total		**59.42**	**43.16**	**102.58**

Source: Departmental information

Chart 3.10: Details of expenditure under ECRP-I during 2020-22

(₹ in crore)



3.4.3 Emergency Covid Response Package -II (ECRP-II)

- ECRP-II was approved by the GOI for ₹ 240.56 crore (₹ 216.51 crore GOI share and ₹ 24.06 crore State share) in August 2021 for 2021-22.

- ₹ 13.10 crore was released to the DHS in September 2021, which was for purchase of essential drugs (₹ 1.95 crore), establishment of 100 bedded field hospital at Indora, Kangra district (₹ 3.75 crore) and establishment of Liquid Medical Oxygen Plant (₹ 7.40 crore) in seven DHs[40] and three CHs[41].
- ₹ 22.95 crore was released to DMER in September 2021, which was for essential drugs in medical colleges (MCs) (₹ 10.05 crore), establishment of 100 bedded field hospitals at Hamirpur and Nahan (₹ 7.50 crore) and establishment of liquid medical oxygen plant at six MCs[42] (₹ 5.40 crore).
- In DMER, it was noticed that funds of ₹ 63.90 crore were received (October 2021) from NHM during the period 2019-22 on account of COVID-19, out of which only ₹ 60.21 crore were transferred to the MCs and the remaining funds of ₹ 3.69 crore were not distributed to MCs. It was further observed that even where COVID-19 funds were transferred to the MCs, there were delays ranging between five to 149 days.
- In IGMC, Shimla, it was noticed that fund of ₹ 25.11 crore[43] was provided for diagnostics, purchase of drugs, equipment, PPE kits and masks etc. through DMER during 2021-23, out of which only ₹ 19.74 crore was utilised and ₹ 5.37 crore remained unutilised as of December 2022.
- In RPGMC Kangra, fund of ₹ 32.69 crore[44] was received for diagnostics, purchase of drugs, equipment, PPE kits and masks etc. during May 2020-June 2022, out of which ₹ 23.79 crore was utilised and ₹ 5.52 crore was returned to DMER, Shimla, while ₹ 3.37 crore was lying unutilised (June 2022).
- In RPGMC Kangra hospital, it was noticed that during 2019-22[45], funds of ₹ 2.33 crore were received for diagnostics, purchase of drugs, equipment, PPE kits and masks etc. against which expenditure of ₹ 8.94 crore was incurred. The excess amount of ₹ 6.61 crore was incurred out of available RKS fund. Against the excess expenditure incurred, ₹ 2.30 crore was received in June 2022 and the balance amount of ₹ 4.31 crore was still pending for recoupment as of July 2022.
- In DHS, Shimla, it was noticed that fund of ₹ 6.59 crore was released to CPWD Shimla for installation of medical oxygen pipeline system in seven district hospitals during June and July 2020. The work was completed in September 2020 after incurring expenditure of ₹ 5.82 crore and the balance fund of ₹ 0.77 crore was still lying unutilised with CPWD Shimla. The balance amount was not returned by CPWD as of January 2023. On this being pointed out, the Department stated that CPWD has been requested to return the amount with interest.

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40 Una, Kullu, Kangra, Bilaspur, Solan, Kinnaur and Lahaul & Spiti.
41 Palampur, Rampur and Sarkaghat.
42 IGMC Shimla, AIMSS Chamiana, YSPGMC Nahan, RKGMC Hamirpur, SLBSGMC Nerchowk Mandi, JLNGMC Chamba.
43 ECRP I: ₹ 12.08 crore, ECRP-II: ₹ 13.03 crore, 2022-23 ₹ 2.59 crore.
44 ECRP I- ₹ 16.98 crore, ECRP II - ₹ 15.71 crore.
45 2019-20 ₹ 0.80 crore, 2020-21 ₹ 1.28 crore 2021-22 ₹ 0.25 crore.

3.4.4 State Disaster Response Fund

Himachal Pradesh State Disaster Management Authority notified rules for "HP SDMA COVID-19 State Disaster Response Fund" in April 2020. Objectives of the HP SDMA COVID-19 State Disaster Response Fund was to provide financial and other assistance/ immediate relief to persons who were adversely affected by the COVID-19 epidemic, upgradation of healthcare/ pharmaceutical facilities/ procuring equipment etc.

Details of funds provided to the DHS and DMER under SDRF is shown in **Table 3.52**.

Table 3.52: Details of allocation and expenditure under SDRF & State during 2019-22

(₹ in crore)

Year	Opening Balance	Allocation	Total Available Funds	Expenditure	Unutilised
2019-20	--	15.00	15.00	0.01	14.99
2020-21	14.99	17.44	32.43	32.18	0.25
2021-22	0.25	69.37	69.62	68.17	1.45
Total		**101.81**		**100.36**	

Source: Departmental information

It can be seen from **Table 3.52** that during 2019-22, ₹ 101.81 crore was allocated to DHS and DMER for purchase of PPE kits, safety equipment, construction of makeshift hospital and salary/wages of outsourced staff employed, out of which ₹ 100.36 crore was shown as spent on COVID-19.

3.4.5 Status of Pressurised Swing Absorption (PSA), Ventilators, Oxygen Concentrators

GoI sanctioned PSA plant for six Medical Colleges, one for AIMSS at Chamiana, eight DHs, 11 CHs, one Ayurvedic Hospital and one Regional Ayurvedic Hospital (RAH) in 28 cities of Himachal Pradesh during 2021-22. All the sanctioned 28 PSA plants stands installed commissioned and are functional as of January 2023.

In four sites, CH Chopal (Shimla), CH Sarahan (Sirmaur), CH Dehra (Kangra) and CH Jogindernagar (Mandi), PSA plants were being installed by Satluj Jal Vidyut Nigam Limited (SJVNL).

- The status of ventilators and oxygen concentrators (as of August 2021) as observed by Audit was as given below.
  - In the 12 districts, 500 ventilators were available in the HIs as of August 2021, out of which 461 ventilators had been installed and the remaining 39 were lying uninstalled.
  - As of August 2021, there were 773 ventilators installed in 56 HIs of the State, of which 149 ventilators (19 *per cent*) were not functional.
  - As of July 2022, RPGMC, Kangra had 142[46] ventilators, of which 119 were functional while the remaining 23 (16 *per cent*) were not functioning. Similarly, out of 136 oxygen concentrators available, 123 were functional and the remaining 13 (10 *per cent*) were not functioning.

[46] 164 ventilators of which 22 were returned.

In reply, Medical Superintendent RPGMC Kangra stated that the process for repair of these equipment was initiated (July 2022).

- In IGMC, Shimla, out of 177 ventilators, 158 were functional and the remaining 19 (11 *per cent*) were not functioning. Similarly, 213 oxygen concentrators were available.
- In six[47] (11 *per cent*) out of 56 HIs, adequate staff was not available for operating the ventilators.

3.4.6 Findings related to COVID-19 in selected Health Institutions

3.4.6.1 Non-installation of the oxygen plant at Civil Hospital Thural

The State Government (October 2021) conveyed in-principle approval for installation of an oxygen plant at CH Thural. The oxygen plant was lifted from CH Baijnath (November 2021) and was lying uninstalled at CH Thural as of December 2021as can be seen in the **Picture 3.45**.

Picture 3.45: **Oxygen plant lying idle in CH Thural**

The Department in its reply stated that the plant could not be installed and commissioned due to non-receipt of funds for construction of pipeline and purchase of DG set.

In the exit conference (January 2023), the Secretary (Health) stated that action would be taken in this regard.

3.4.6.2 Non-functioning of PSA oxygen plant constructed under SDRF in RPGMC, Kangra

GoI had conveyed (November 2020) the allocation of seven PSA (Pressure Swing Adsorption) Oxygen Generation Plants to Himachal Pradesh, to meet out the oxygen requirement of the HIs. The DHS had accorded expenditure sanction of ₹ 28.56 lakh (February 2021) for installation of 900 LPM capacity PSA oxygen generation plant proposed by RPGMC Kangra (November 2020).

It was noticed that the PSA plant had been installed (September 2021) but was not commissioned (July 2022) as shown in **Pictures 3.46** and **3.47**. The PSA plant was not made operational because of issues of purity and pressure of oxygen, faulty change-over and use of rubber pipe instead of stainless steel/ aluminium/copper pipe.

[47] CH Bhoranj, CH Sujanpur, CH Rohru, DH Solan, Makeshift Hospital Nalagarh and DH Una.


Pictures 3.46 and 3.47: Non-functional PSA plant in RPGMC Kangra

In reply, Principal, RPGMC Kangra stated (July 2022) that as per the recommendation of the technical expert, separate pipeline was required for which tender process was initiated (July 2022). The reply was not acceptable as this issue should have been resolved at the time of installation.

3.4.6.3 Failure to install PSA plant and irregularities thereof in IGMC, Shimla

National Highway Authority of India (NHAI), Shimla communicated to the Principal, IGMC for setting up a PSA plant with capacity of 1000 LPM (July 2021). NHAI had instructed (July 2021) to ensure that PSA plant site be made ready and designate at least two persons for operation of the PSA plant, so that Defense Research Development Organisation (DRDO) could be intimated to supply the PSA machinery.

During joint physical verification (June 2022) of the site of the PSA plant **(Pictures 3.48**, **3.49** and **3.50)**, it was noticed that only civil works and a DG set was found. There was loose cable wire unconnected to the transformer while the civil structure was found filled with oxygen cylinders. On enquiry, the hospital authorities stated that the machinery could not be transported to the selected site due to inaccessibility of the location. Consequently, the hospital authorities have been procuring oxygen from the private agency. Had the hospital installed the plant, the expenditure in procuring the oxygen cylinders could have been minimised and the PSA plant been utilised as envisaged.

Picture 3.48: Civil work with DG set

Picture 3.49: Old oxygen pipeline

Picture 3.50: Cable wire installed for connection to transformer

In the exit conference (January 2023), Secretary (Health) stated that the PSA plant was transferred to HIs in Mandi.

3.4.6.4 Non-utilisation of ventilator machine in CH, Kandaghat

In CH Kandaghat, Audit noticed that two portable ventilators with accessories were received from CMO Solan in July 2021. Both the ventilators could not be installed and were lying idle in the store (January 2022) as there was no basic infrastructure to install them. Due to

improper planning/assessment on the part of the Health Department, the ventilators were lying idle.

3.4.6.5 Sub-standard hand sanitisers

In the Composite Testing Laboratory Kandaghat, it was noticed that 36 numbers of samples (26 *per cent*, out of 137 samples) of hand sanitisers lifted by the State Drug Controller during 2020-22 were declared sub-standard in the laboratory. Before getting the results of testing, these hand sanitisers of the particular batches were already used by the public during COVID-19.

3.4.6.6 Utilisation Certificate

The State Government had conveyed (December 2020) ex-post facto approval to operationalise "the makeshift hospital" at Kangra for treating COVID-19 patients in public interest at a cost of ₹ 3.44 crore. 50 *per cent* of funds amounting to ₹ 1.72 crore were released to CSIR[48]/CBRI[49] Roorkee in advance by DHS in November 2020.

It was noticed in audit that the Principal, RPGMC Kangra had also transferred funds of ₹ 1.48 crore (April 2022) to the Director, CSIR-CBRI, Roorkee for construction of the makeshift hospital. Utilisation Certificates (UC) for ₹ 3.20 crore were neither called nor were the utilisation submitted by the executing agency against the released funds.

In reply, the Health Authorities stated that UCs for ₹ 1.72 crore have to be followed up at the Directorate level and for the remaining amount of ₹ 1.48 crore, the matter is being taken up with Director, CSIR-CBRI, Roorkee.

3.5 Conclusion

- In DH Hamirpur, all OPD services were available, whereas in DH Lahaul and Spiti only two OPD services were available. In the remaining DHs in the state, OPD services ranging between six to 12 were available. In selected CHs, one to nine out of 12 OPD services were available. In all selected CHCs, four out of six OPD services were not available. In absence of these OPD services, patients have to go to other higher-level hospitals.
- In all PHCs, 24*7 emergency service was not available as stipulated in IPHS norms 2012.
- In the State, the number of pregnant mothers who were not registered within the first trimester was 13.69 *per cent*, mothers who had not received three or more ANC check-ups was 25.78 *per cent* and 20.39 *per cent* mothers were not given 100/180 IFA tablets during 2016-22.
- In DHs, against the requirement of 88 tests, 11 to 47 tests were available. In five selected CHs against the norms of 48 tests, 17 to 30 tests were available and in CH Chango, only six tests were available. In five selected CHCs, against the norms of 33 tests, 15 to 27 tests were available. In CHC Bachhwai, only two tests were available and in CHC Majheen, no tests were available.

[48] Council of Scientific and Industrial Research.
[49] Central Building Research Institute.

- Firms failed to commission the 69 STPs in the State even after 19 to 22 months after the scheduled date of completion of the project. The firms have procured and transported the STP material at site, which was lying in ruined condition inside the campus of the HIs.
- None of the HIs had conducted periodical fire audit except DH Solan, DH Kangra and both MCHs. In HIs where fire audit was conducted, the Fire Department had recommended some measures but compliance with the recommendations were not taken up by any of the HIs. In none of the selected HIs, buildings were constructed after taking earthquake safety into consideration.
- Patients Grievance redressal committees were not constituted in any of the selected HIs except in CH Shahpur, CHC Pooh and CHC Syri.
- The State Government prepared the ECRP-I of ₹ 114.74 crore for 2019-22, and ₹ 102.58 crore was spent by the NHM during 2020-22. Major amount was spent on diagnostics including Sample Transport (34 *per cent*) and HR, including incentives for Community Health Volunteers (21 *per cent*).
- ECRP-II was approved by the GOI for ₹ 240.56 crore (₹ 216.51 crore GOI share and ₹ 24.06 crore State share) in August 2021. Further, ₹ 13.10 crore was spent on establishment of field hospitals at Indora, Kangra district and establishment of Liquid Medical O_2 Plant in seven DHs and three CHs. ₹ 22.95 crore was released to DMER in September 2021 which was for essential drugs in medical colleges (MCs) (₹ 10.05 crore), establishment of 100 bedded field hospitals at Hamirpur and Nahan (₹ 7.50 crore) and establishment of liquid medical oxygen plant at six MCs (₹ 5.40 crore)
- DMER received ₹ 63.90 crore from NHM during 2019-22 on account of COVID-19, out of which only ₹ 60.21 crore were transferred to the MCs and fund of ₹ 3.69 crore was not disbursed. Further, there were delays ranging between five to 149 days in transfer of these funds to MCs.
- Ventilator facility was available in 56 health institutions of the State and 624 out of 773 number of ventilators were working while the remaining 149 (19 *per cent*) ventilators were not functioning.
- At CH Thural, oxygen plant which was lifted from CH Baijnath in November 2021 was not installed. Similarly, in both the medical colleges (IGMC, Shimla and RPGMC, Kangra) PSA plant could not be made operational because the machinery could not be transported to the selected site due to high altitude of the location in IGMC and issues of oxygen pressure etc, in RPMGC, Kangra.

3.6 Recommendations

Government may consider:

- *Ensuring that all essential services as envisaged in IPHS norms 2012 are available in HIs at all levels.*

- *Periodic review and distribution of resources as per the norms enabling availability of resources in the secondary/ primary level HIs and load management in the higher level HIs.*
- *Ensuring that MOs are posted in all PHCs so as to provide 24x7 services.*
- ***For HIs without adequate potable water or suitable toilet facilities, coverage of such institutions under Jal Jiwan Mission and Swacch Bharat Mission may be considered**.*
- *Strengthening the ante-natal care by proper monitoring and follow up of all registered pregnant women in collaboration with ASHA workers and ensuring that all pregnant women are registered and provided all the ANCs so that MMR, IMR, still births etc. can be reduced.*
- *Constituting Patients Grievance redressal committee in all HIs so that the views of the patients are addressed.*
- *Ensure providing all the laboratory tests in all HIs as per the requirement.*
- *Carrying out repairs to non-functional emergency equipment/facilities at the earliest for removing obstacles for prompt addressing of emergency cases.*
- *Making equipment available to health institutions with higher patient loads.*
- *Ensuring timely action for installation/commissioning of the STPs so as to make the sewerage treatment plants functional.*
- *The information on Ambulance response time should be maintained in prescribed format for proper evaluation of the service provided.*
- *Reviewing disaster preparedness in all HIs and taking remedial/preventive/preparatory steps in coordination with State Disaster Management authorities and adhering to their recommendations.*
- *Adhering to the BMW Rules rigorously to provide an infection-free environment in the hospital and dealing with any deviations seriously and developing an adequate monitoring mechanism.*

CHAPTER-IV
DRUGS, EQUIPMENT & OTHER CONSUMABLES

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 months[1] 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	DH 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	DH 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	Baijnath
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	Dharampur
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

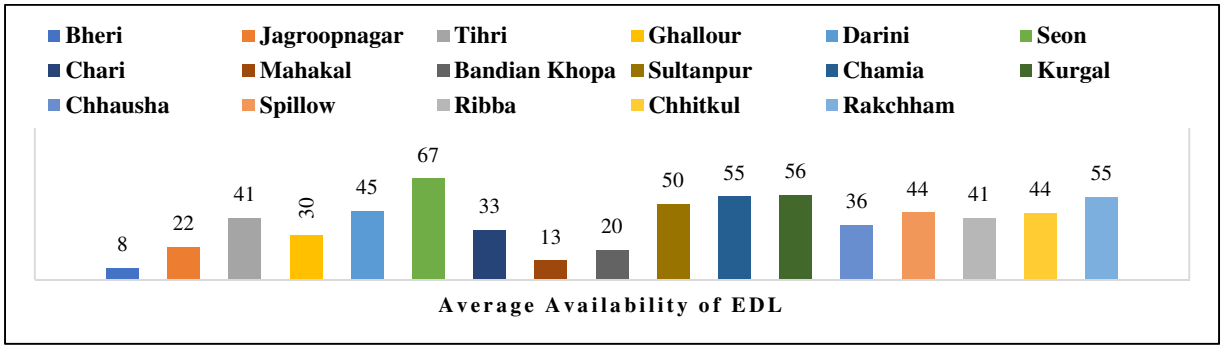
Source: Departmental figures.

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 categories out of the required categories[2] 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.

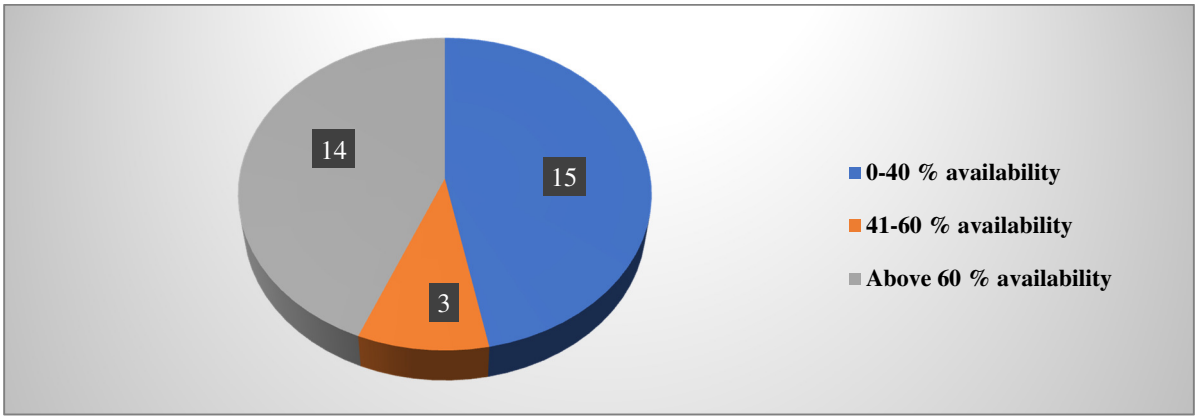
Table 4.7: Category-wise (serial number) non-availability of drugs in the selected PHCs

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 months[3] 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 four[4] 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 crore[5] 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		17		
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.

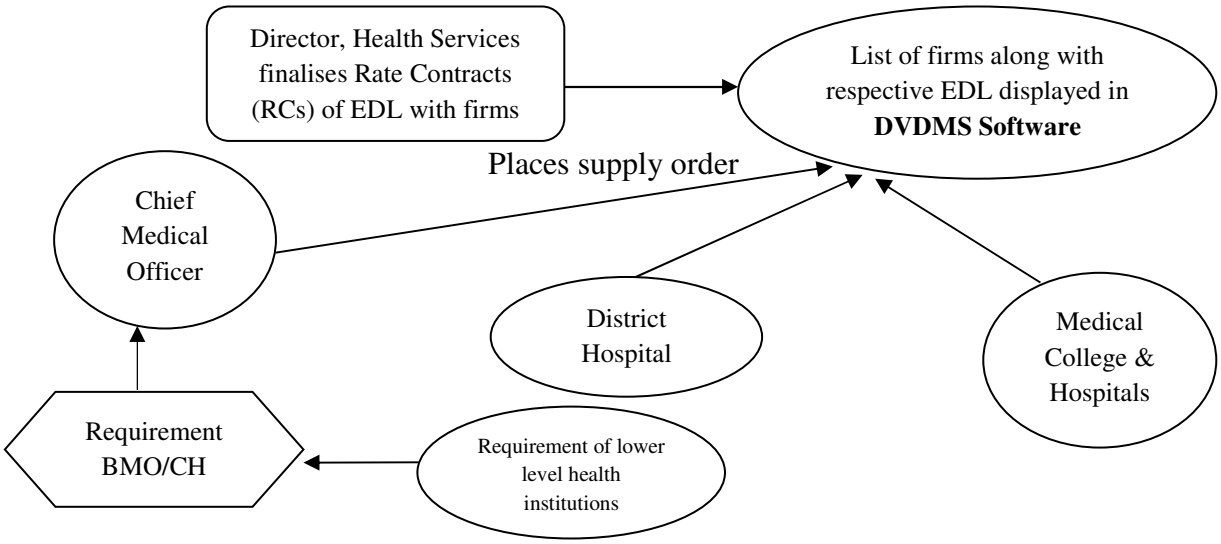
Thus, delay on the part of the CMO/committee in approving the demand and placing of supply order led to shortage of medicines in health institutions/BMOs stores and had an adverse effect on patients availing the facility, as stated in **Paras 4.1** to **4.3**.

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 CMOs[7] and two MCHs[8] 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 months[9] 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.

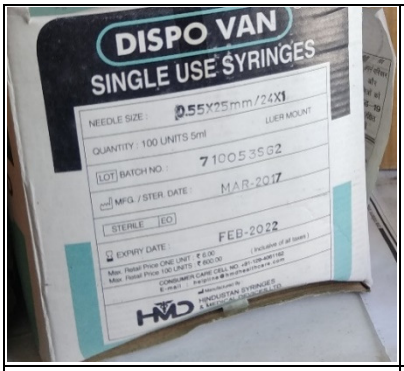
- 77.21 lakh quantity of drugs expired in three selected districts and an MCH during the same period as detailed in **Table 4.14**.

Table 4.14: Expiry of drugs at health institutions

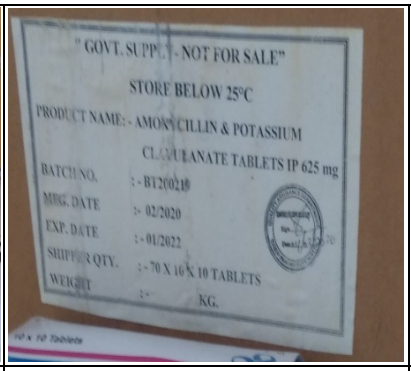
Name of the health institution	Quantity of drugs expired (in lakh)
CMO, Solan	36.42
CMO, Kangra	33.97
CMO, Kinnaur	6.80
KNSH (Maternity wing of IGMC) Shimla	0.02
Total	**77.21**

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 two[10] out of eight selected BMOs and two[11] 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 16[12] 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."

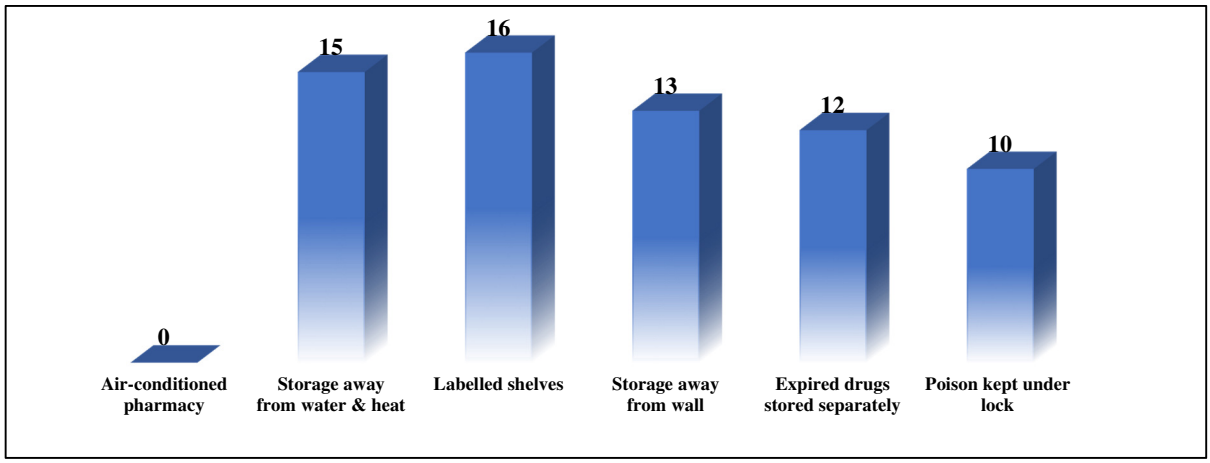
Audit noticed that in the reports of prescription audit[13] conducted by the health institutions, the doctors were prescribing generic medicines. However, during audit, 97 prescription slips issued to the patients were randomly checked and it revealed that in 47 prescription slips, non-generic medicines were prescribed in seven selected health institutions[14]. 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)*	Kanda-ghat (15 beds)*	Thural (35 beds)	Shahpur (30 beds)	Jawala-mukhi (40 beds)	Essential (as per IPHS for 51 to 100 beds)	Baijnath (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 Baijnath. 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 equipment[15] 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 firm[17] 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.

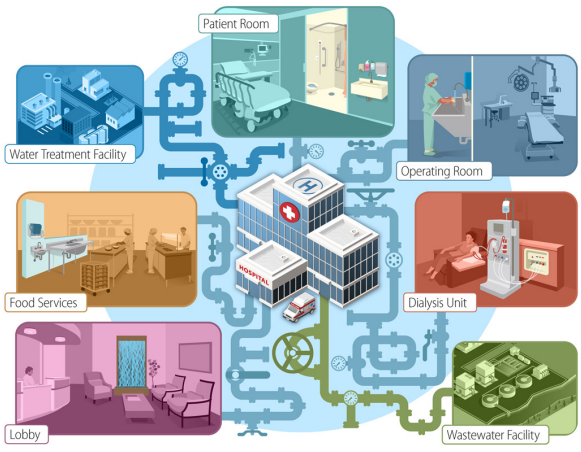
- Prescription audit was conducted by the authorities of health institutions. However, 97 prescription slips of the patients checked by Audit revealed that in 47 prescription slips, non-generic medicines were prescribed in seven selected health institutions.
- Against the requirement of various types of equipment in IPHS norms, there was shortage ranging as follows: DH**s**: 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.*

CHAPTER-V
HEALTHCARE INFRASTRUCTURE

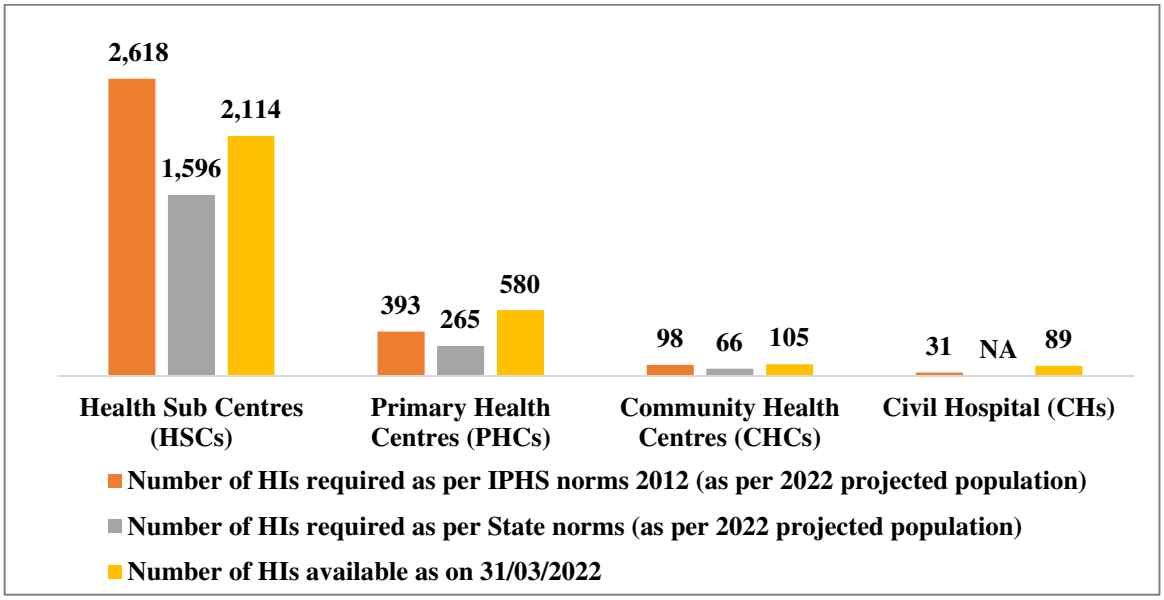


Chapter V: Healthcare Infrastructure

5.1 Availability of Healthcare Institutions (HIs)

IPHS norms 2012 for creation of HIs are based on population and geographical area. The State Government had not adopted IPHS norms but had notified (April 2016) new norms[1] for staffing/ population for opening/upgradation of new health institutions, covering the creation of CHCs, PHCs and HSCs except CHs in the State based on population in general and tribal areas[2] of the State (no norms notified for other parameters). The number of available HIs (HSCs, PHCs, CHCs and CHs) in the State as of March 2022 is shown in **Chart 5.1**.

Chart 5.1: Number of available HIs (HSCs, PHCs, CHCs and CHs) in the State as of March 2022



Projected population of Himachal Pradesh in 2022 as per Directory of HIs by GoHP (2022) is 78.53 lakh, In Chamba district, projected population as per Directory was 5.92 lakh which had increased by 22.52 *per cent* w.r.t to 2011 census. Projected Population of blocks Pangi and Bharmour for 2022 is calculated on the basis of increase of 22.52 *per cent* projected population of district Chamba w.r.t to population of 2011 as block-wise projected population of 2022 was not available in Directory 2022.

Source: As per information from Health Department.

As seen from the **Chart 5.1**, in Himachal Pradesh, the number of HSCs were less than that prescribed in the IPHS norms 2012 while other HIs (PHCs, CHCs, CHs) were more than the prescribed numbers. It was also seen that the number of HIs actually available were more than the State norms (HSCs, PHCs and CHCs). Audit observed that higher number of HIs did not translate into adequate facilities and manpower as discussed in Chapters II & III. Further, as of March 2023, 1,468 (530 PHCs, 938 HSCs) HWCs were operationalised against 2,136 (563 PHCs, 1,573 HSCs) notified HWCs as discussed in **Para 7.3.4.1**.

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1 HSC: (Tribal area: 3,000, General: 5,000), PHC: (Tribal area: 20,000, General: 30,000), CHC: (Tribal area: 80,000, General: 1,20,000).

2 Kinnaur district, Lahaul & Spiti District and Pangi & Bharmour blocks of Chamba District.

In addition to the above, there were 12 District Level Hospitals, six Medical College Hospitals (MCHs) (two MCHs in Shimla and Kangra were running prior to 2016-17 and thereafter four MCHs[3] were established during 2016-17 to 2021-22) and one Dental college functioning in the State. There was one private MCH namely Maharishi Markandeshwar Medical College and Hospital, Solan with bed capacity of 720 established in 2013. In addition to this, State Government established one Medical Super Speciality hospital at Chamiana, Shimla in September 2022 and four specialities namely Neurology, Endocrinology, Plastic Surgery and Radiology were made functional during March 2023. AIIMS, Bilaspur was inaugurated in October 2022 with a bed capacity of 750 beds in the State.

5.1.1 Increase in numbers of HIs in the State between 2016-17 and 2021-22

Addition of new HIs in the State between 2016-17 and 2021-22 is shown in **Table 5.1**.

Table 5.1: Addition of new HIs in the State between 2016-17 and 2021-22

HIs	Numbers in 2016-17	Numbers in 2021-22	Increase (*per cent*)
DHs	12	12	-
CHs	59	89	30 (50.85)
CHCs	89	105	16 (17.98)
PHCs	538	580	42 (7.81)
HSCs	2,083	2,114	31 (1.49)

Source: As per Annual Administrative Report for 2016-17 and department reply for 2021-22.

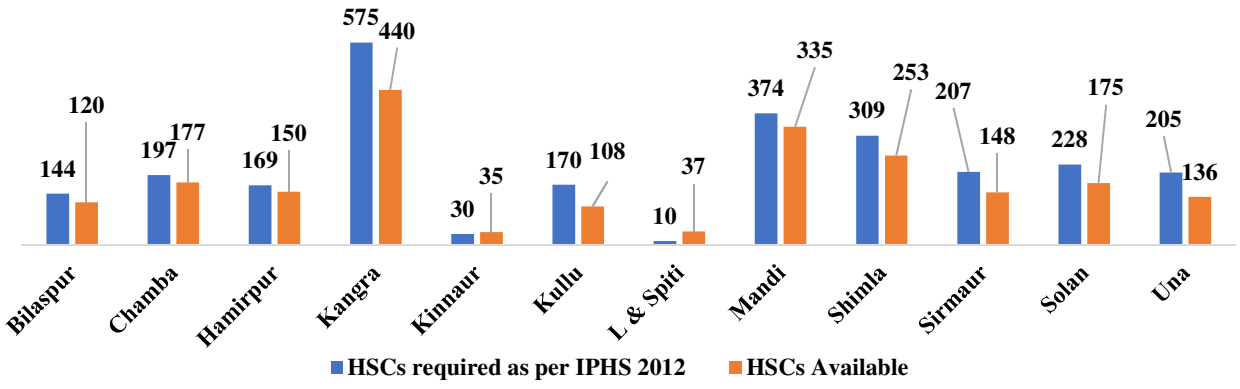
As seen from **Table 5.1**, the number of DHs had remained constant in the State, whereas increase in the number of CHs, CHCs, PHCs and HSCs was by 50.85 *per cent*, 17.98 *per cent*, 7.81 *per cent* and 1.49 *per cent* respectively.

5.1.2 Availability of HIs in all districts in the State

The availability of Primary and Secondary HIs (HSCs, PHCs, CHCs and CHs) in all districts w.r.t IPHS norms 2012 are shown in **Chart 5.2**.

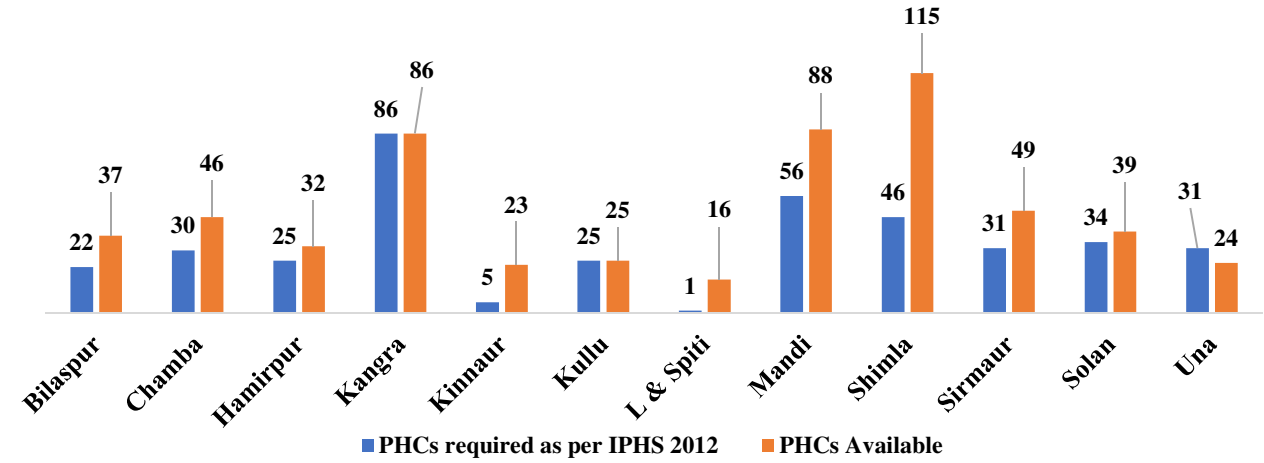
Chart 5.2: Number of HIs available w.r.t IPHS norms 2012 in all districts as of March 2022

HIs	IPHS norms 2012
HSC	One HSC for every 3000 people in hilly/tribal areas

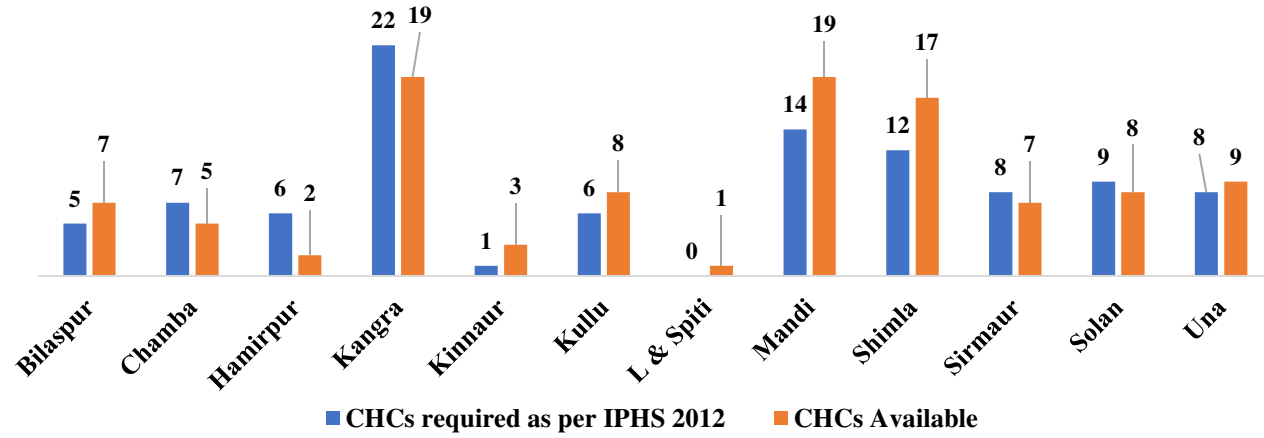


[3] YSPGMC Nahan- 2016, RKGMC Hamirpur- 2018, SLBSGMC Mandi- 2017 and PJLNGMC Chamba- 2017.

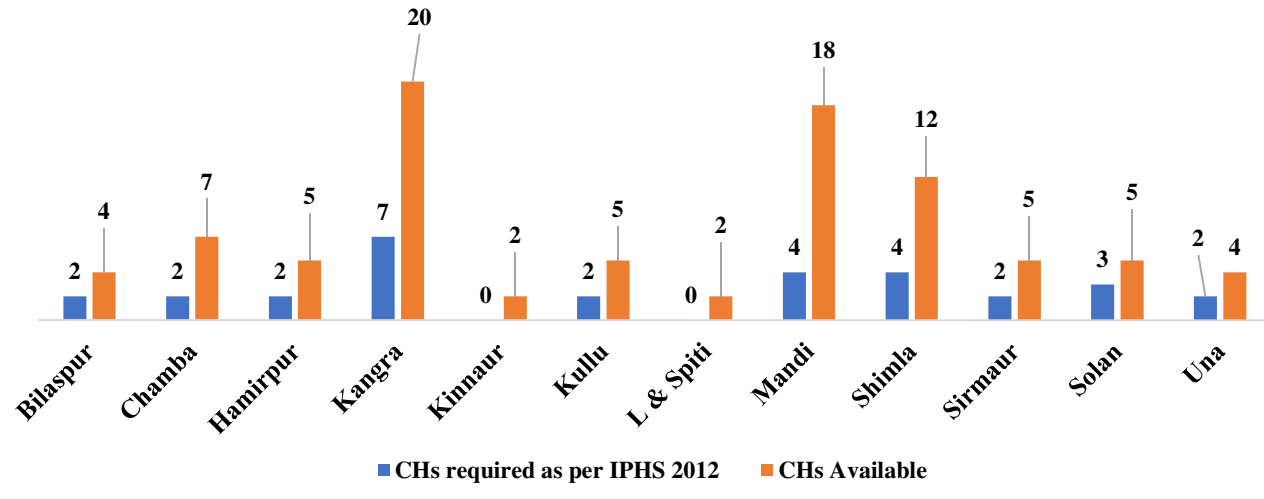
PHC	One PHC for every 20,000 people in hilly/tribal areas



CHC	One CHC for every 80,000 people in hilly/tribal areas



CH	One CH for every 2.5 lakh people



Source: Health Department directory 2021-22, HP.

From **Chart 5.2**, it can be seen that:

i. HSCs were less when compared to IPHS norms 2012 in all districts except in Kinnaur and Lahaul & Spiti.

ii. PHCs were more than or equal to IPHS norms 2012 in all districts except Una.

iii. CHCs were less in five districts[4] and more in seven districts[5] when compared to IPHS norms 2012.

iv. CHs were more when compared to IPHS 2012 norms in all the districts.

It was noticed that the number of HIs at every level in all districts were more w.r.t IPHS norms 2012 except in HSCs and CHCs, but the available facilities and infrastructure to be provided were not adequate as described in the succeeding paragraphs.

5.1.3 Distribution of HIs in selected districts

Details of distribution of HIs in the selected districts as of March 2022 are shown in **Appendix 5** and based upon the data, it was noticed that:

- In Kangra district, maximum number of HIs (25.13 *per cent*) were present in three[6] areas. The areas with least number of HIs (three[7]) comprised only 15.22 *per cent* of total HIs.
- In Solan district, two[8] constituencies had 49.78 *per cent* HIs while one[9] out of five constituencies has less than 15 *per cent* HIs.
- In Kinnaur district, there is only one constituency, having one DH, two CHs, three CHCs, 23 PHCs and 35 HSCs.

  Thus, in Kangra and Solan districts, there was lack of uniform distribution of HIs.

5.1.4 Availability of residential accommodation (DHs, CHs, CHCs and PHCs)

5.1.4.1 DHs

As per IPHS norms 2012, all essential medical and para-medical staff should be provided with residential accommodation. If accommodation cannot be provided due to any reason, they should stay in the vicinity, so that essential staff is available 24x7.

In the three selected DHs, it was noticed that as on 31 March 2023, residential accommodation was available only for 32 doctors out of 97 doctors and 38 out of 236 nurses and paramedical staff as detailed in **Appendix 6**.

In the Exit Conference (January 2023), the Secretary (Health) stated that the matter of accommodation of the doctors and staff will be looked into and necessary action will be taken in this regard.

5.1.4.2 CHs

In the six selected CHs, it was noticed that as on 31 March 2023, residential accommodation was available only for 12 doctors out of 71 doctors and 16 out of 169 nurses and paramedical staff as detailed in **Appendix 6**.

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4 Chamba, Hamirpur, Kangra, Solan and Sirmaur.
5 Bilaspur, Lahaul & Spiti, Kullu, Kinnaur, Mandi, Shimla and Una.
6 Baijnath (50), Jaisinghpur (46) and Sullah (46).
7 Kangra (28), Indora (29) and Dharamshala (29)
8 Arki (58) and Nalagarh (55)
9 Kasauli (34).

5.1.4.3 CHCs

In the seven selected CHCs, it was noticed that as on 31 March 2023, residential accommodation was available only for nine doctors out of 34 doctors and 16 out of 64 nurses and paramedical staff as detailed in **Appendix 6**.

5.1.4.4 PHCs

As per IPHS norms 2012, decent accommodation with all amenities like 24-hours water supply, electricity etc. should be available for Medical Officer, nursing staff, pharmacist, laboratory technician and other staff. If the accommodation cannot be provided due to any reason, they should be staying in the vicinity of PHC so that they are available 24 × 7, in case of need.

In the selected PHCs, it was noticed that in case of eight[10] out of the selected 17 PHCs, residential accommodation was available as on date of audit.

5.1.5 Joint physical verification of PHCs/HSCs

IPHS norms 2012 prescribe that PHCs/HSCs should have their own building located in an easily accessible area.

During test check of records and as per information provided by the Medical Officer, PHC Chamia (Solan District), it was noticed that the PHC was previously running in three rooms, which were in deteriorating condition as seen in **Picture 5.1**. The building got damaged due to heavy rains in August 2018 and the roof of the building was damaged as 2/3rd of the ceiling had fallen off. The PHC was shifted to Panchayat building having two rooms only as seen in **Picture 5.2** during December 2019. Thus, the PHC did not have its own permanent building for attending to the patients.

During joint physical verification of PHCs and HSCs, Audit observed abandoned quarters in PHC Chhausha (Solan District) as seen in **Picture 5.3,** and dilapidated buildings of HSC, Boh and Basnoor (Kangra District) as seen in **Pictures 5.4** and **5.5** respectively.

		
Picture 5.1: Old building of PHC Chamia in need of repairs	**Picture 5.2: PHC, Chamia currently running in two rooms of GP Bhawan**	**Picture 5.3: Abandoned quarter at PHC, Chhausha under BMO Syri**

[10] PHCs- Chari, Seon, Darini, Spillow, Rakchham, Chhitkul, Bheri and Bandian Khopa.

		
Picture 5.4: HSC Boh	**Picture 5.5: HSC Basnoor under BMO Shahpur**	**Picture 5.6: HSC Bhaled running in one room of GP Bhawan under BMO Shahpur**

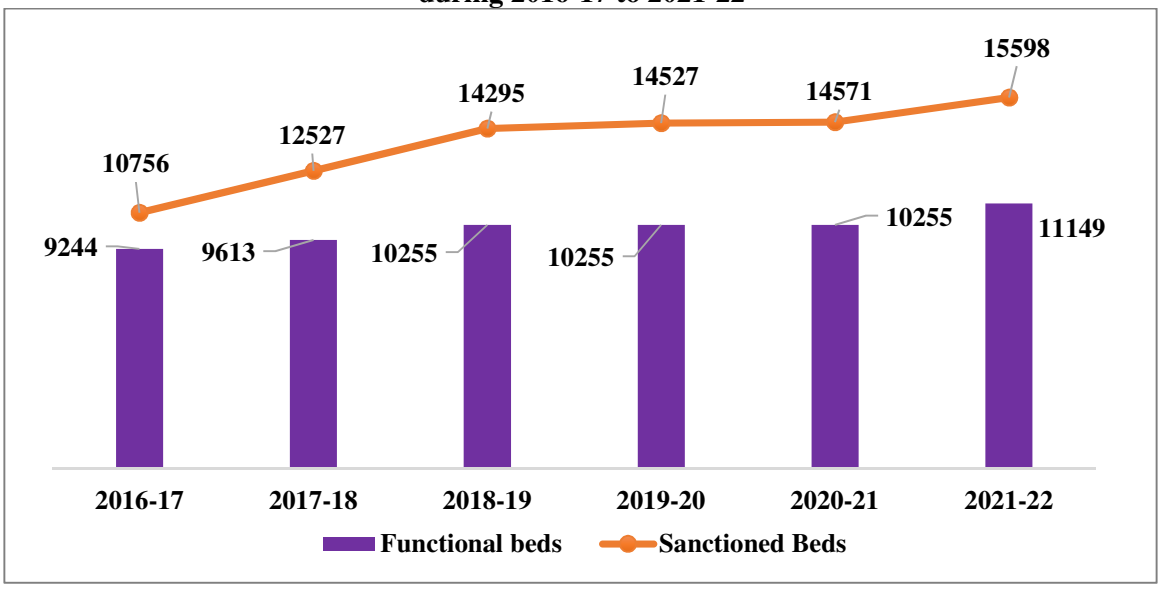
Also, Audit noticed during joint physical inspection that nine[11] out of 32 selected HSCs[12] did not have their own buildings and were running in private/other departmental buildings. HSC Bhaled (Kangra District) was running in one room of Panchayat Bhawan as seen in **Picture 5.6**.

5.2 Availability of beds in HIs (DHs, CHs, CHCs and PHCs) in the State

IPHS norms 2012 prescribe that the total beds required in HIs (DHs and CHs) should be based on local population. In case of CHC, 30 beds and in PHC, 4-6 beds should be available. The Department had neither prescribed any standard/criteria nor adopted IPHS norms 2012 for providing hospital beds in the HIs.

In the State of Himachal Pradesh, the number of functional beds available against the sanctioned beds during 2016-17 to 2021-22 is given in **Chart 5.3**.

Chart 5.3: Availability of functional beds in the State against the State sanctioned beds during 2016-17 to 2021-22



Source: Director Health Services

From **Chart 5.3**, it can be seen that the number of functional beds was not in conformity with the sanctioned beds during 2016-17 to 2021-22. The State had increased the

[11] Kinnaur- Pangi, Kangra- Nausera, Sakoh, Bharanta, Boh, Bhaled, Sadoon, Panjala, Ghirhol.
[12] Kinnaur-eight, Solan -eight and Kangra-16.

sanctioned strength of beds by 45.02 *per cent* from 2016-17 to 2021-22 but the actual availability of beds increased by only 20.60 *per cent* during this period. Thus, the actual availability of beds did not increase proportionately. Also, there were overall savings of ₹ 1,427.03 crore during 2016-17 to 2021-22 against the budgetary allotment as commented in **Para 6.4**. Out of this, there was overall savings of ₹ 148.40 crore under capital expenditure as commented in **Para 6.5.1.** These savings could have been utilised for ensuring availability of sanctioned number of beds.

In the Exit Conference (January 2023), the Secretary (Health) said that the shortage in availability of functional beds with reference to sanctioned beds was due to ongoing civil works.

5.2.1 Availability of beds in Medical College Hospitals (Tertiary Level)

National Medical Commission (NMC) vide notification dated 28th October 2020 notified that every MCH should have an attached Teaching hospital with at least 300 beds and in hilly and North Eastern States, with 250 beds.

In the two selected MCHs, availability of beds w.r.t. sanctioned strength as of March 2021 is shown in **Table 5.2**.

Table 5.2: Status of sanctioned beds and functional beds

Name of MCHs	Sanctioned beds	Available beds
Indira Gandhi Medical College & Hospital (IGMC) including Kamla Nehru State Hospital (KNSH)	1,124[13]	1,120[14]
Dr. Rajendra Prasad Government Medical College & Hospital (RPGMC) (including SSB and Covid beds)	866	866

Source: Respective Medical College

From **Table 5.2**, it was evident that the Government had provided the hospitals with sufficient beds as per the NMC norms. However, during joint physical inspection in different in-patient wards of IGMC, it was noticed that there was double and triple occupancy on a single bed. This indicated that though sufficient beds were available as per NMC norms, these were insufficient to handle the actual in-patient load.

In MCHs, double and triple occupancy could be due to lack of healthcare facility/beds/ human resource at secondary level HIs as discussed in succeeding paras and Chapter II-Human Resources.

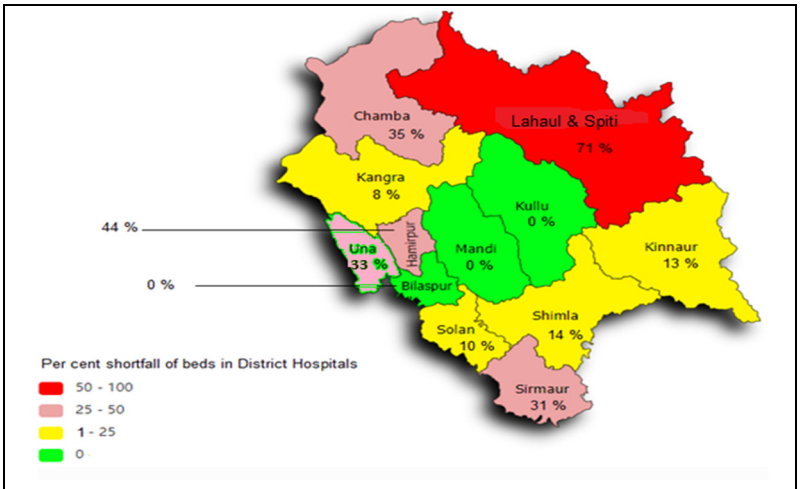
5.2.2 Availability of beds in DHs (Secondary level)

As per IPHS norms 2012, the size of a district hospital is a function of the hospital bed requirement, which in turn is a function of the size of the population it serves. Based on the assumption of the annual rate of admission as one per 50 population and average length of stay in a hospital as five days, the number of beds required for a district having a population of 10 lakh will be around 300 beds. So, DHs were divided into five grades having 100-500 beds.

i. Shortfall in availability of beds in all the district hospitals.

[13] IGMC-850, KNSH-274.
[14] IGMC-873, KNSH-247.

The shortage of beds in District Hospitals has been depicted in **Map 5.1** and details are given in **Appendix 7**.



Map 5.1: Shortfall of beds in all the district hospitals

Scrutiny of statistical data revealed that the number of available beds in the DHs did not conform to the State sanctioned beds as there was significant shortage of beds in all DHs except DHs at Bilaspur, Mandi and Kullu, which ranged between eight *per cent* and 71 *per cent* as of March 2022.

ii. Audit observed in the three selected DHs that the functional beds were less than the sanctioned beds as detailed in **Table 5.3**.

Table 5.3: Status of functional beds against sanctioned beds during 2016-17 to 2021-22

Year	DH Kinnaur			DH Solan			DH Kangra		
	Sanctioned beds	Functional beds	Shortfall (*per cent*)	Sanctioned beds	Functional beds	Shortfall (*per cent*)	Sanctioned beds	Functional beds	Shortfall (*per cent*)
2016-17	100	100	0 (0)	200	180	20 (10)	300	225	75 (25)
2017-18	125	109	16 (13)	200	180	20 (10)	300	225	75 (25)
2018-19	125	109	16 (13)	200	180	20 (10)	300	225	75 (25)
2019-20	125	109	16 (13)	200	180	20 (10)	300	225	75 (25)
2020-21	125	109	16 (13)	200	180	20 (10)	300	225	75 (25)
2021-22	125	109	16 (13)	200	180	20 (10)	300	275	25 (8)

The minimum requirement of functional beds in district hospitals as per IPHS norms 2012 is 100. Audit observed the following:

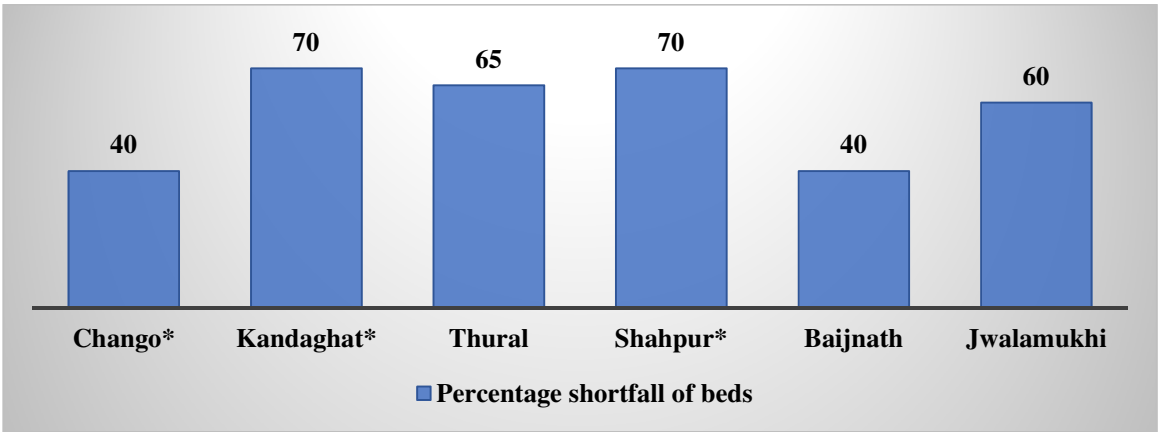
- In DH Kinnaur, beds were available as per IPHS norms 2012 (20-25 beds)[15] but the number of functional beds were not as per the sanctioned beds, and there was shortfall of 13 *per cent*.
- In DH Solan, beds were available as per IPHS norms 2012 with 80 *per cent* occupancy (150-187 beds) but were less than the sanctioned beds by 10 *per cent*.
- In DH Kangra, beds were not available as per IPHS norms 2012 (378-472 beds). Also, the number of functional beds were not as per the sanctioned beds, as shortfall ranged between eight to 25 per cent during 2016-22.

[15] Calculated on the basis of projected population of the district in 2022 having bed occupancy of 80 *per cent* and 100 *per cent.*

5.2.3 Availability of beds in selected CHs (Secondary level)

As per IPHS norms 2012, the availability of beds in CHs should be ranging from 31 to 100 or more. It was observed that in three[16] out of six selected CHs as on 31st March 2022, there were less than 31 functional beds as per the details given in **Appendix 7**. Audit further observed in the selected CHs that there was shortage of functional beds ranging between 40 *per cent* and 70 *per cent* against the State sanctioned beds as of March 2022 as shown in **Chart 5.4**.

Chart 5.4: Percentage shortfall of beds in selected CHs w.r.t to State sanctioned strength

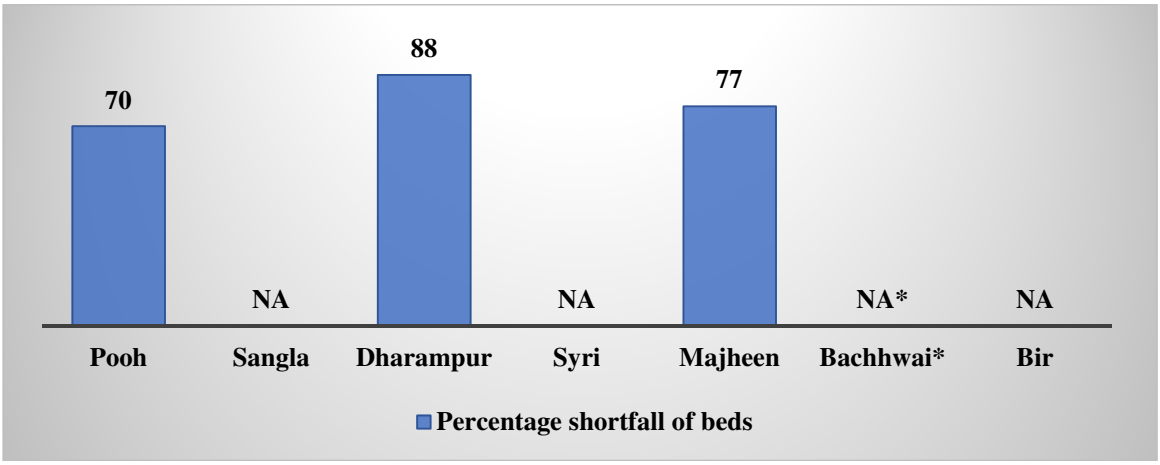


***** *CHs having less than 31 functional beds*

5.2.4 Availability of beds in selected CHCs (Secondary level)

As per IPHS norms 2012, CHCs should have 30 beds. In four out of six CHCs having sanctioned beds, the sanctioned bed strength was lower than IPHS 2012 norms and no sanctioned strength was prescribed for one CHC. In three out of six CHCs, there was shortfall of functional beds between 70 *per cent* and 88 *per cent* w.r.t to State sanctioned strength as on 31st March 2022 as detailed in **Appendix 7** and shown in **Chart 5.5**.

Chart 5.5: Percentage shortfall of beds in selected CHCs



**No sanctioned beds. NA= Not applicable as in Sangla, Syri and Bir there is no shortfall*

[16] Chango (six), Kandaghat (15), Shahpur (30).

5.2.5 CHCs (Secondary level) and PHCs (Primary level) in selected districts running without beds

As per IPHS norms 2012, CHCs should have 30 beds and PHCs should have four to six beds.

Audit noticed that in selected districts as of 31 March 2022, six CHCs and 101 PHCs were running without any beds as detailed in **Table 5.4**.

Table 5.4: CHCs and PHCs running without beds as of March 2022

District	Total CHCs	CHCs running without beds	Total PHCs	PHCs running without beds
Solan	8	2	39	21
Kangra	19	4	86	63
Kinnaur	3	0	23	17
Total	**30**	**6**	**148**	**101**

Source: Health Department Directory 2021-22, HP.

Non-availability of functional beds restricts access to health treatment and contributes to poor quality of healthcare.

5.3 Status of execution of works of HIs in the State

Details of completed works, works not started and works in progress in the HIs in the State are shown in **Table 5.5**.

Table 5.5: Details of works completed, in progress and not started

(₹ in crore)

Year	Works Sanctioned		Works completed		No. of works not started		No. of works in progress	
	No. of works	Amount released	Total works	Amount utilised	Works	Amount involved	Works	Amount involved
Upto 2016	191	246.68	125	130.18	23	11.10	43	105.40
2017	66	115.49	25	31.39	21	9.02	20	75.08
2018	81	146.40	37	53.52	22	17.61	22	75.27
2019	46	114.16	7	7.24	18	8.74	21	98.18
2020	29	37.90	5	1.76	10	2.61	14	33.53
2021	36	66.97	5	12.73	19	11.41	12	42.83
Total	**449**	**727.6**	**204**	**236.82**	**113**	**60.49**	**132**	**430.29**

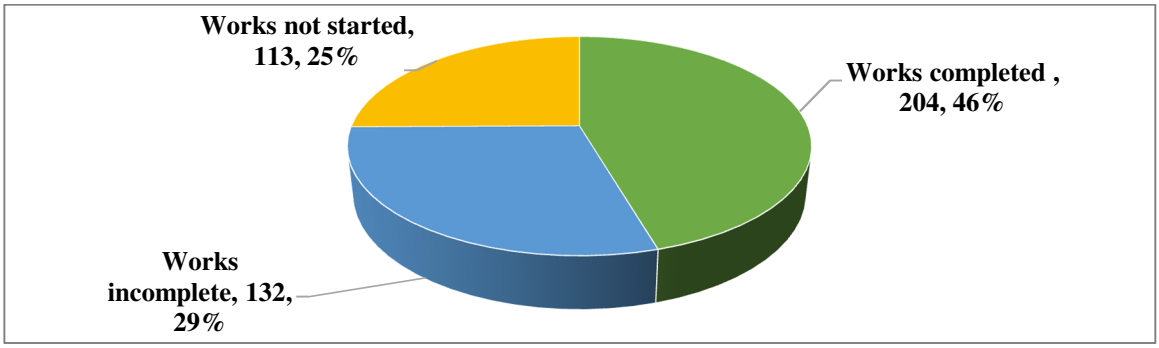
Source: Departmental figures

As can be seen from **Table 5.5**, 191 works were sanctioned upto 2016 (sanctioned during 1998 to 2016), of which 66 were under execution/had not started. Thereafter, 258 works were sanctioned during 2017-21 by the State Government for construction of different HIs under State and GoI schemes. These works included construction and upgradation of HIs. It was further noticed that out of the total 449 works, 204 works were completed, 132[17] works (43 sanctioned during 1998-16, 89 sanctioned during 2017-21) were incomplete and 113[18] (23 sanctioned during 1998-2016, 90 sanctioned during 2017-21) works were not started as shown in **Chart 5.6**.

[17] HSCs-33, PHCs-35, CHCs-18, CHs-25, DHs-one, Staff quarters-16, Others-four

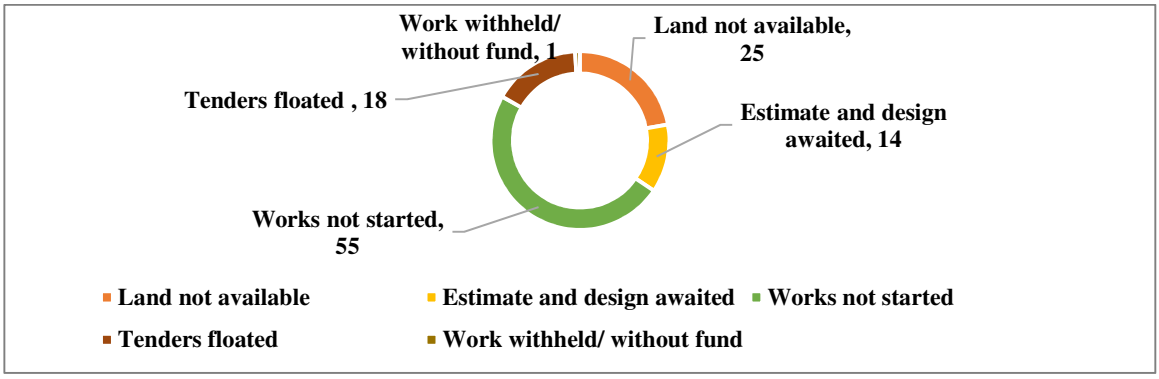
[18] HSCs-46, PHCs-31, CHCs-13, CHs-seven, DHs-two, Staff quarters-11, Others-three

Chart 5.6: Status of works in State as a whole



Reasons for non-starting of 113 works included non-availability of land, estimates and designs and non-execution of works by contractors as shown in **Chart 5.7**.

Chart 5.7: Number of works not started

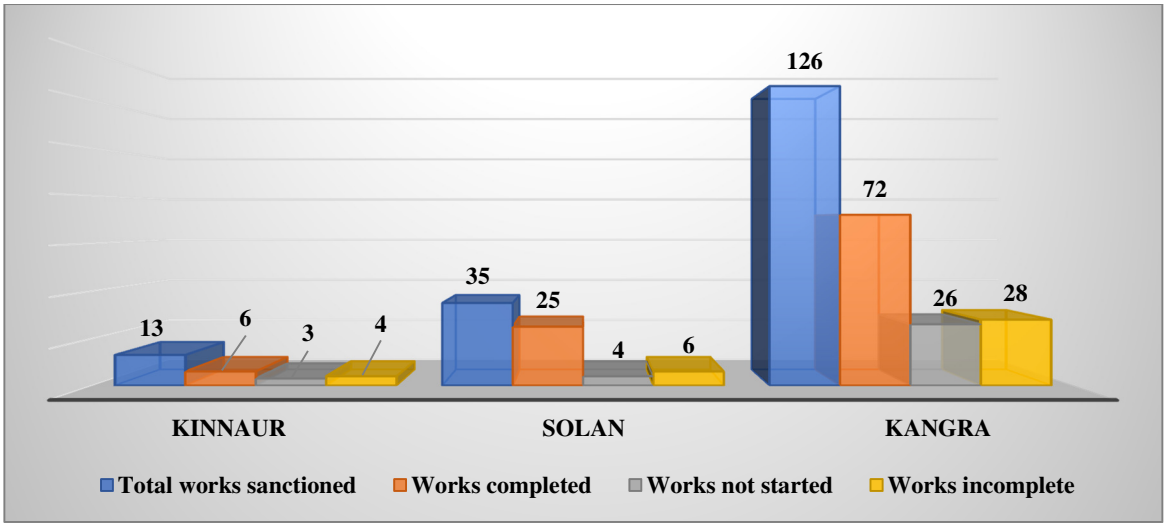


In the Exit Conference (January 2023), the Secretary (Health) stated that the delay was due to procedural issues which would be expedited for timely completion of works in future.

5.3.1 Status of execution of works of HIs in the selected districts

Position of the works sanctioned (during 1998 to 2020) in the three selected districts is shown in **Chart 5.8**.

Chart 5.8: Status of work in selected districts



In the selected districts, Audit noticed that funds amounting to ₹ 12.88 crore involving 33 works[19] (14 HSCs, eight PHCs, two CHCs, three CHs, five Staff quarters and one laboratory) were blocked due to non-commencement of works in Kinnaur (three works of ₹ one crore), Solan (four works of ₹ 1.45 crore) and Kangra (26 works of ₹ 10.43 crore).

Thus, lack of monitoring by CMOs and sanctioning of works without ensuring encumbrance-free land and non-commencement/delays by contractors resulted in blocking of funds of ₹ 12.88 crore in the selected districts.

5.3.2 Execution of works in selected Tertiary and Secondary level HIs

In secondary and tertiary level HIs, Audit examined the records pertaining to execution of the works. The results of the scrutiny are given in **Table 5.6**.

Table 5.6: Execution of works in selected Tertiary and Secondary level HIs

(₹ in crore)

Sl. No.	Name of HIs	Sanction Amount	Issue
Tertiary Level HIs			
1.	Centre of Excellence in Mental Health at Kangra	35.39	Administrative Approval (AA)/ Expenditure Sanction (ES) for ₹ 27.80 crore was accorded by the State Government during April 2017 for Centre of Excellence in Mental Health at Kangra. Additionally, AA for ₹ 7.59 crore was also granted by the State Government during March 2021 for provision of electrical works. An amount of ₹ 35.39 crore was deposited with HPPWD division, Kangra during 2016-22. The construction work was started by the contractor during September 2018. As of May 2023, expenditure of ₹ 35.39 crore had been incurred against the deposit of ₹ 35.39 crore. It was further noticed that GoI, time and again asked the State Government for timely completion of the project. As of May 2023, 98 *per cent* civil work had been completed. Thus, due to slow pace of execution of the work coupled with lackadaisical approach of the department, construction work of the project was still incomplete even after five years from the date of sanction.
2.	Upgradation of IGMC Shimla	213.01	GoI approved (January 2014) the upgradation of IGMC Shimla, at a cost of ₹ 150.00 crore (Central share: ₹ 120.00 crore and State share: ₹ 30.00 crore) within the campus of college under PMSSY-III. The State Government decided (December 2016) to shift the proposed site of Super speciality block to another site at Chamiana (Shimla district) due to inadequate land on the college campus. Forest clearance under Forest Rights Act (FRA) and Forest Conservation Act (FCA) was obtained in December 2016 and March 2018 respectively. In the meantime, GoI enhanced the project and approved to make a stand-alone hospital at a cost of ₹ 213.01 crore (June 2017). The project involved upgrading of existing departments, procurement of medical equipment and services, construction of trauma centre and super-speciality block. HSCC was appointed by GoI as consultant/executing agency for civil works and HLL Infra Tech Services Limited (HITES) (PSU of GoI) was the supporting

[19] Land not available- eight, non-execution of works by contractor, tender floated-25.

Sl. No.	Name of HIs	Sanction Amount	Issue
			agency for the procurement of medical equipment. The work was started in October 2019 and completed in September 2022 but not yet operationalised. The approach roads (two km) connecting to the hospital is not widened (as of May 2023) as work is yet to be started by the PWD. In reply, Principal Atal Institute of Medical Super Specialities stated (May 2023) that as intimated by the PWD authorities, the tender for metalling & widening of road has been awarded and work will be started soon. Considering the narrow road coupled with high traffic the department should initiate construction of the above road immediately so that patients could reach the hospital in time.
3.	Sarai Bhawan at RPGMC, Kangra under Corporate Social Responsibility	2.50	 Proposal for the construction of four storied Sarai building (guest house for 54 medical attendants) at RPGMC, Kangra for ₹ 6.20 crore was submitted by college authorities for which Government had accorded AA of ₹ 2.50 crore in August 2017. Funds of ₹ 2.40 crore (₹ 1.57 crore under CSR from M/s BHEL and ₹ 0.83 crore under MPLADS) was received. The construction work was awarded by HPPWD in June 2018. The construction work of ground floor and 1st floor was not complete, though expenditure to the tune of ₹ 2.40 crore had been incurred as of June 2022 and fund of ₹ 40.00 lakh was required to complete the ground floor and 1st floor. Thus, due to paucity of funds, the ground and first floor could not be completed and resultantly, construction of 2nd and 3rd floor could not be started.
Secondary Level HIs			
1.	CH Kandaghat	16.90	 Administrative Approval (A/A) of ₹ 16.90 crore for the construction of CH building at Kandaghat was granted in August 2016. After incurring expenditure of ₹ four crore, the construction work was lying pending due to paucity of funds since August 2018. The DHS during September 2021 requested the State Government to provide additional funds but the funds were not provided. The MO, CH Kandaghat stated (May 2023), that work is still held up and no funds have been received till date.
2.	CH Jawalamukhi	14.25	 Initially A/A was accorded for the construction of CHC Jawalamukhi during March 2009 for ₹ 2.49 crore (the existing CHC was shifted to Matri Chhaya Yatri bhawan) and ₹ 1.08 crore was incurred till March 2013. In February

Sl. No.	Name of HIs	Sanction Amount	Issue
			2014, it was decided to upgrade the CHC Jawalamukhi to 50 bedded CH and subsequently to 100 bedded CH in March 2017 followed by proposed change in site in January 2018. The construction work was further delayed due to change of site, court case and change in scope. The revised estimate of the work was sanctioned during August 2020 for ₹ 14.25 crore. As observed by Audit (May 2023), 70 *per cent* work has been completed after incurring expenditure of ₹ 1.75 crore and CH was running in a dilapidated building. In reply, BMO Jawalamukhi stated (January 2022) that the delay was also due to court case and work was restarted during September 2021.
3.	CH Shahpur	12.09	CHC Shahpur was upgraded to 100 bedded CH during February 2019. The preliminary estimate amounting to ₹ 12.09 crore was sent to DHS Shimla in February 2020, which was approved during March 2020 and the budget of ₹ 87.50 lakh was allotted. Subsequently, ₹ 1.28 crore was released during 2020-22 (₹ 78 lakh in August 2020 and ₹ 50 lakh in July 2021). The construction work was started during December 2021 and the structural work upto plaster of wall completed (May 2023). The department, in its reply stated (March 2022) that due to administrative reasons, there was delay in sanctioning of the estimates by the higher offices. The reply was not acceptable as due to delay in completion of the work, the intended benefit through upgradation of the hospital could not be extended to the beneficiaries.
4.	CH Thural	18.42	CH Thural was upgraded to 100 beds in September 2018. However, AA/ES for construction of additional block for newly upgraded hospital was granted only during May 2021 for ₹ 18.42 crore, after a lapse of 32 months. An amount of ₹ 2.30 crore was deposited with the executing authority during June 2021 and the construction work of the building was started by the executing agency (PWD) during November 2021. The construction work was in the initial stage at time of audit (December 2021). In reply, the BMO Thural stated (February 2022) that the delay in obtaining the A/A was due to covid. The reply was not acceptable as notification of upgradation of CH was issued during September 2018 and the department had ample time to obtain the AA/ES before Covid-19, which was during March 2020.
Staff Quarters			
1.	Types I, II, III and IV Staff Quarters in CH Jawalamukhi	3.77	AA/ES for ₹ 3.06 crore was accorded for construction of staff quarters at CH Jawalamukhi during May 2013, which was revised to ₹ 3.77 crore during March 2018. Construction work was completed (Types I, II and IV) and handed over to the Health Department during September 2019. These quarters were allotted during March 2020 and June 2020. Audit noticed that: Although the quarters were constructed and allotted, they were not provided with sewerage connections as a result of which:

Sl. No.	Name of HIs	Sanction Amount	Issue
			(i) The possession of four Type IV quarters was not taken up by the officials of the hospital due to non-availability of sewerage connection. Thus, these accommodations remained unoccupied. Sewerage connection has now been provided on 16/05/2023 after lapse of nearly 3.5 years (May 2023) and the department is yet to allot the accommodation. (ii) The possession of Type I and Type II quarters was taken up by the employees without sewerage connections by making their own arrangements nearly for a period of 3.5 years. However, sewerage connection has now been provided in May 2023. (iii) Type III quarters could not be allotted due to non-completion of building. Thus, due to non-provision of sewerage connections, the Type IV quarters remained unutilised and Type I and II were occupied by residents by making their own arrangements for nearly three and half years.

5.4 Availability of water and power back-up in selected HIs

5.4.1 Availability of water supply (Tertiary level)

As specific norm for water availability was not mentioned in NMC norms, therefore, water availability was checked on the basis of IPHS norms 2012 for DHs which provide that water requirement per bed per day should be 450 to 500 liters.

In selected MCHs, Audit noticed that:

- In IGMC, the water capacity of the overhead tank was 3.8 lakh litres as of July 2022, which was not proportionate (450 to 500 litres of water per bed per day) to the bed strength (873) of the hospital which was therefore dependent on water supply from Municipal Corporation, Shimla. Further the hospital did not have any back-up arrangements for water supply.
- In KNSH, the water capacity of the overhead tank was 1.74 lakh litres as of August 2022 and was proportionate to the bed strength (247) of the hospital. The hospital was dependent on supply of water from MC Shimla.
- In RPGMC, Kangra the water capacity of the overhead tank was 4.35 lakh litres as of July 2022 and was proportionate to the bed strength (866) of the hospital.

5.4.2 Availability of water supply (Secondary level)

As per IPHS norms 2012, in DHs and CHs, arrangements should be made for round-the-clock piped water supply along with an overhead water storage tank with a provision to store at least three days water requirement and it should have pumping and boosting arrangements. Approximately 450 to 500 litres of water per bed per day is required. For CHCs, as per IPHS norms 2012, arrangements shall be made to supply 10,000 liters of potable water per day to meet all requirements (including laundry) except firefighting.

Scrutiny of records of the selected HIs (DHs, CHs and CHCs) revealed that sufficient water tank capacity was not available in 11[20] out of 16 selected HIs as of March 2021 as per the details given in **Appendix 8**.

In the Exit Conference (January 2023), the Secretary (Health) stated that supply is constrained due to the topology of the State.

5.4.3 Availability of Power and backup (Tertiary level and Secondary level)

As specific norms for power availability and backup were not mentioned in NMC norms, therefore, power availability and backup were checked on the basis of IPHS norms 2012 for DHs.

As per IPHS norms 2012, in DHs, there should be 24-hour uninterrupted stabilised power supply with three phases, capacity of 25-50 KVA capable of taking up additional load. Generator back-up with 25-50 KVA capacity was essential. In CHs, standby generator to cater for the full load of the hospital should be provided. In CHCs, generator back-up should be available. All the equipment should be covered under AMC in DHs and CHs only.

The status of power availability and back-up in selected HIs is shown in **Table 5.7**.

Table 5.7: Status of power availability and back-up as of March 2021

Name of HIs	Availability of 24 hours uninterrupted stabilised power supply	Availability of generator and inverters installed in the hospital	AMC of generators and inverters was done
IGMC, Shimla	✓	10	✓
KNSH, Shimla	✓	5	✓
RPGMC, Kangra	✓	18	Yes, DG sets only
DH Kinnaur	✓	2	✓
DH Solan	✓	8	✓
DH Kangra	✓	1	✓
CH Chango	×	1(not working properly)	×
CH Kandaghat	×	3	×
CH Thural	×	2	×
CH Jawalamukhi	×	1	×
CH Shahpur	✓	1	×
CH Baijnath	✓	3	×
CHC Pooh	×	2	Not applicable
CHC Sangla	✓	1	Not applicable
CHC Syri	×	0	Not applicable
CHC Dharampur	×	2	Not applicable
CHC Bachhwai	×	1	*
CHC Majheen	×	0	Not applicable
CHC Bir	×	0	Not applicable

*Source: Information supplied by selected Health Institutions. * Though not mandated, CHC Bachhwai had AMC.*

It can be seen from **Table 5.7** that:

- In the selected MCHs and DHs, there was availability of 24 hours uninterrupted stabilised power supply, power back-ups and the generators/inverter were covered under annual maintenance contract (AMC) except in RPGMC, Kangra where AMC of only the DG set was done.

[20] DH Solan, DH Kangra, CH Chango, CH Shahpur, CH Baijnath, CH Jawalamukhi, CHC Pooh, CHC Sangla, CHC Dharampur, CHC Bachhwai and CHC Majheen

- In four out of six selected CHs, 24 hours uninterrupted power supply was not available as they were dependent on generators and inverters and two[21] CHs had uninterrupted power supply. All the generators/inverters of selected CHs were not covered under AMCs.
- In three[22] out of seven selected CHCs, both uninterrupted stabilised power supply and power backup were not available. In one CHC (Sangla), 24 hours uninterrupted stabilised power supply was available. In three[23] out of seven CHCs, only power backup was available.

5.5 Conclusion

The health infrastructure in the State was not up to the mark as the number of Health Sub Centres were less than prescribed in IPHS norms 2012. Also, the number of functional beds were not in conformity with the sanctioned bed strength during 2016-17 to 2021-22. The State had increased the sanctioned strength of beds by 45.02 *per cent* from 2016-17 to 2021-22 but the actual availability of beds was increased only by 20.60 *per cent* during this period. There was shortfall of residential accommodation in selected HIs for doctors[24] (67 *per cent* to 83 *per cent*) and nursing & paramedical staff (75 *per cent* to 91 *per cent*) at secondary level, which hampered the availability of staff at all levels for uninterrupted and effective delivery of healthcare services. In both the MCHs, double/triple occupancy was observed in beds in a few wards. Nine out of 32 selected HSCs did not have their own buildings and were running in private/other departmental buildings. During joint physical verification, buildings of PHC/HSCs were found to be in dilapidated condition.

There were 191 number of works sanctioned during 1998 to 2016 which were under-execution/ had not started upto 2016. Thereafter, 258 works were sanctioned during 2017-21 by the Government for construction of different HIs under State and GoI schemes. Out of these, 113 works were not started due to various reasons such as non-availability of land, estimates and designs awaited, non-execution of work by contractors etc. Water storage capacity was not proportionate in one MCH (IGMC, Shimla) while in 11 out of 16 selected HIs (DHs, CHs and CHCs), sufficient water tank capacity was not available. Uninterrupted electricity supply, essential for efficient healthcare service delivery, was not available in four out of six CHs and in three out of seven CHCs, generators/inverters were not available.

5.6 Recommendations

Government may ensure the following:

- *HSCs are available in each district as per IPHS norms 2012.*
- *Availability of beds as per sanctioned number of beds in deficient HIs, considering the patient load.*

---

21 CH Shahpur and CH Baijnath.
22 CHC Syri, CHC Majheen and CHC Bir.
23 CHC Dharampur, CHC Bachhwai and CHC Pooh.
24 Doctors (CHC- 74 *per cent*, CH- 83 *per cent*, DH- 67 *per cent*), Paramedical staff (CHC-75 *per cent*, CH- 91 *per cent*, DH- 84 *per cent*).

- *Adequacy of residential accommodation for doctors and paramedical staff at all levels so that 24x7 delivery of healthcare services is achieved.*
- *The bed strength of the MCH be revised/considered as per IPD patient load so as to avoid double/triple occupancy in beds.*
- *Proper monitoring of the works related to health institutions in co-ordination with executing/funding agencies and addressing the issue to expedite the timely completion of work.*
- *Adequacy of water supply and uninterrupted electricity supply so that quality healthcare can be provided.*

CHAPTER-VI
FINANCIAL MANAGEMENT

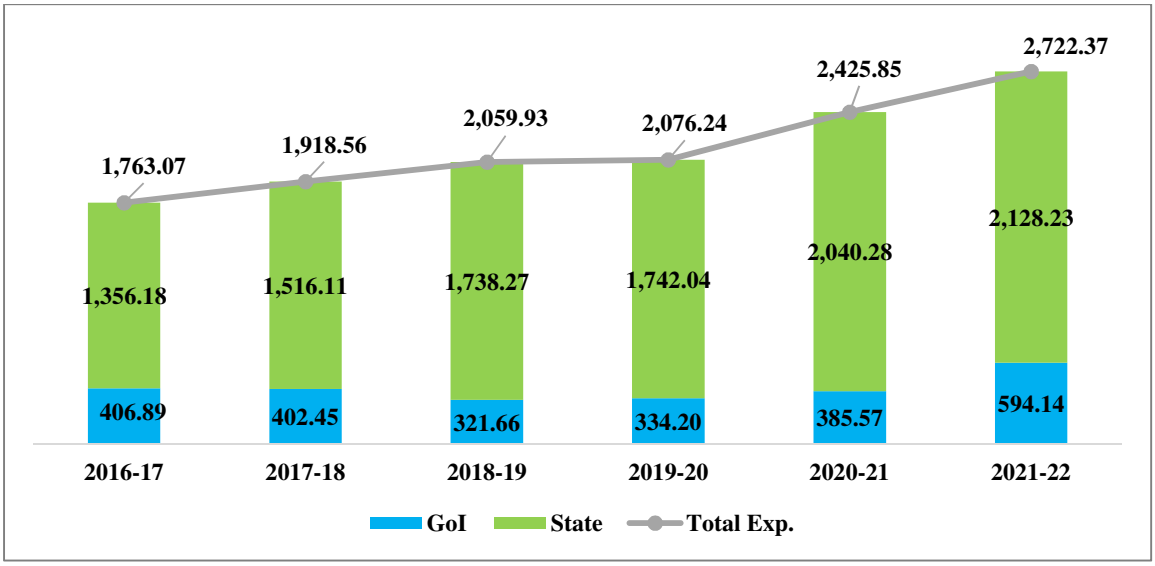
Chapter VI: Financial Management

6.1 Trend of Expenditure (Central & State Government)

Finances for health infrastructure and management of health services in the State are sourced through the State budget, National Health Mission and schemes under Government of India (GoI) etc. Details of expenditure incurred from Government of India and State Government in Department of Health (Health and Family Welfare, Medical Education & Research, Health Safety & Regulation and Dental Health) during the period 2016-22 are given in **Chart 6.1**:

Chart 6.1: Expenditure trend

(₹ in crore)



Note: - Does not contain AYUSH. The consolidated figure with AYUSH is incorporated in Table 6.1.

6.2 Budget and Expenditure w.r.t GSDP

National Health Policy 2017 targeted to increase spending on health from 1.15 *per cent* to 2.50 *per cent* of GSDP by 2025. Budget and expenditure (both GoI and State) w.r.t to GSDP is shown in **Table 6.1**.

Table 6.1: State Government Budget Allocation and Expenditure during 2016-22

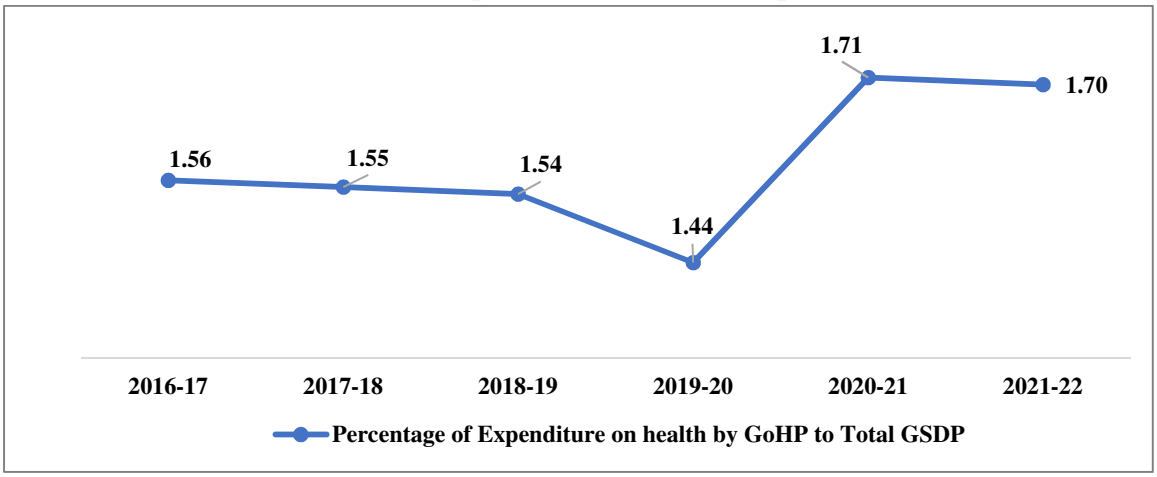
(₹ in crore)

Year	Budget allocated for health	Expenditure on health	GSDP (at current prices)	*per cent* of expenditure w.r.t. GSDP
2016-17	2,081.91	1,962.81	1,25,634	1.56
2017-18	2,201.55	2,143.29	1,38,551	1.55
2018-19	2,625.51	2,295.80	1,49,442	1.54
2019-20	2,565.38	2,344.74	1,62,816	1.44
2020-21	3,228.59	2,671.62	1,56,522	1.71
2021-22	3,365.97	2,984.39	1,75,173	1.70

Source: Budget and Expenditure departmental figure (including AYUSH) and GSDP from Economic & Statistical Department.

As can be seen from **Table 6.1**, budgetary expenditure on health services in the State during 2016-22 ranged from 1.44 *per cent* to 1.71 *per cent* of GSDP. The trend of expenditure on health is shown in **Chart 6.2**.

Chart 6.2: Trend of expenditure on health compared to GSDP



As seen from **Chart 6.2**, the trend of expenditure as compared to GSDP of the State declined during the period 2016-17 to 2019-20. It improved in 2020-21 due to both increase in spending in the health sector and decrease in GSDP of the State. There was net increase of 52.05 *per cent* in the expenditure on health as compared to the corresponding increase of 39.43 *per cent* in GSDP over the period 2016-17 to 2021-22.

6.3 Funding on health in terms with National Health Policy

As per the National Health Policy 2017, the State is to increase expenditure on Health to more than eight *per cent* of the total budget by 2020**.** Expenditure on healthcare w.r.t total expenditure of the State is shown in **Table 6.2**.

Table 6.2: Comparison between Budget & Expenditure on health in the State

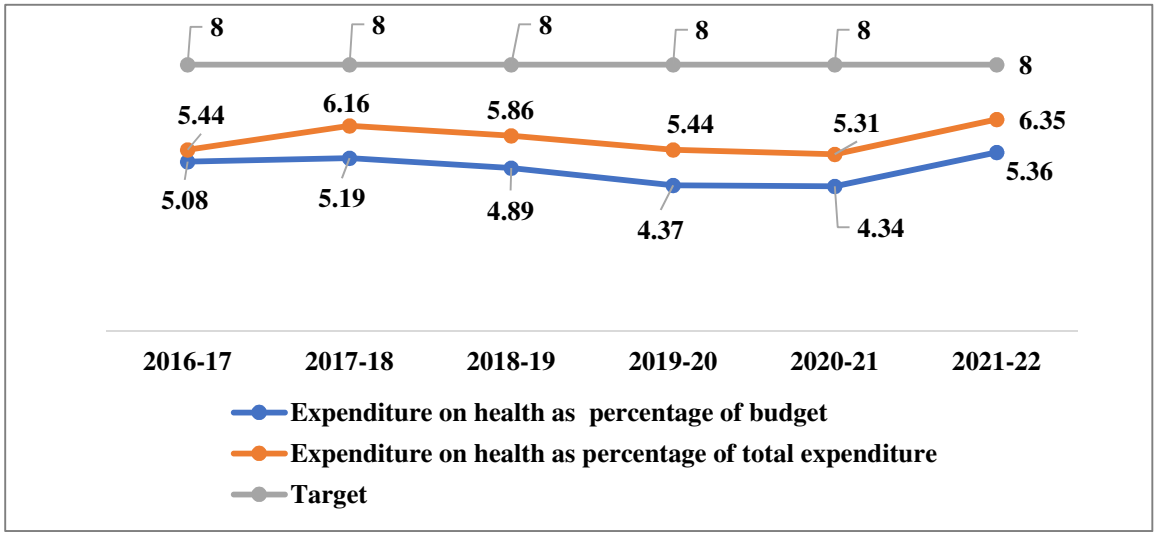
(₹ in crore)

Year	Allocated budget	Total expenditure of the State	Expenditure on health*	Expenditure on health as percentage of budget	Expenditure on health as percentage of total expenditure
2016-17	38,675.28	36,075.78	1,962.81	5.08	5.44
2017-18	41,267.45	34,811.21	2,143.29	5.19	6.16
2018-19	46,984.67	39,166.85	2,295.80	4.89	5.86
2019-20	53,707.68	43,063.30	2,344.74	4.37	5.44
2020-21	61,596.65	50,305.30	2,671.62	4.34	5.31
2021-22	55,714.72	46,989.18	2,984.39	5.36	6.35

Source- Appropriation Accounts, Finance Accounts,

**State Expenditure (Departmental Figures) including Ayush.*

Chart 6.3: Expenditure on health in comparison with budget and total expenditure



From **Chart 6.3**, it can be seen that against the target of eight *per cent*, government spending on the health sector has increased from ₹ 1,962.81 crore (5.44 *per cent* of total expenditure of the State) during 2016-17 to ₹ 2,984.39 crore (6.35 *per cent* of total expenditure of the state) during 2021-22. Though the funds allocated were less than that envisaged in NHP 2017, the State was unable to utilise the funds allocated as shown in **Table 6.3**. Non-utilisation of the funds allocated indicated lack of absorptive capacity of the State. As such, there is still scope for the government to increase expenditure on the health sector.

6.4 Comparison of Allocation and Expenditure

The budget and expenditure for the years 2016-22 for the funds from GoI and allocations in State Government budget and percentage of unspent funds is given in **Table 6.3**:

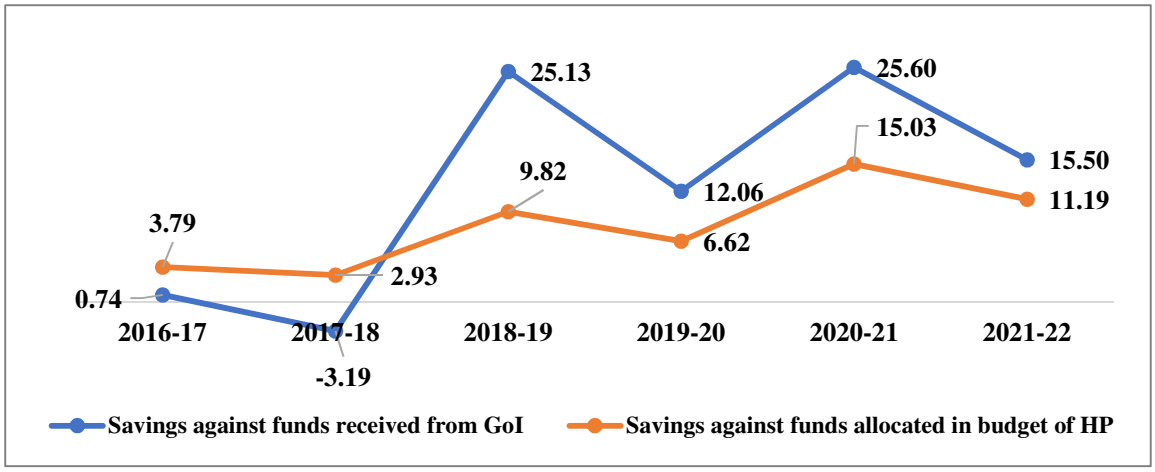
Table 6.3: Overall Budget and Expenditure

(₹ in crore)

Year	Government of India			Government of Himachal Pradesh			Total Savings
	Budget	Expenditure	Savings (-)/ Excess (+)	Budget	Expenditure	Savings (-)/ Excess (+)	
2016-17	409.94	406.89	-3.05 (0.74)	1,409.66	1,356.18	-53.48 (3.79)	-56.53 (3.11)
2017-18	390.02	402.45	+12.43 (3.19)	1,561.80	1,516.11	-45.69 (2.93)	-33.26 (1.70)
2018-19	429.63	321.66	-107.97 (25.13)	1,927.52	1,738.27	-189.25 (9.82)	-297.22 (12.60)
2019-20	380.03	334.20	-45.83 (12.06)	1,865.61	1,742.04	-123.57 (6.62)	-169.40 (7.54)
2020-21	518.24	385.57	-132.67 (25.60)	2,401.21	2,040.28	-360.93 (15.03)	-493.60 (16.91)
2021-22	703.13	594.14	-108.99 (15.50)	2,396.26	2,128.23	-268.03 (11.19)	-377.02 (12.16)
Total	**2,830.99**	**2,444.91**	**-386.08 (13.64)**	**11,562.06**	**10,521.11**	**-1,040.95 (9.00)**	**- 1,427.03 (9.91)**

Source: Departmental figures, Figures in brackets indicate percentage

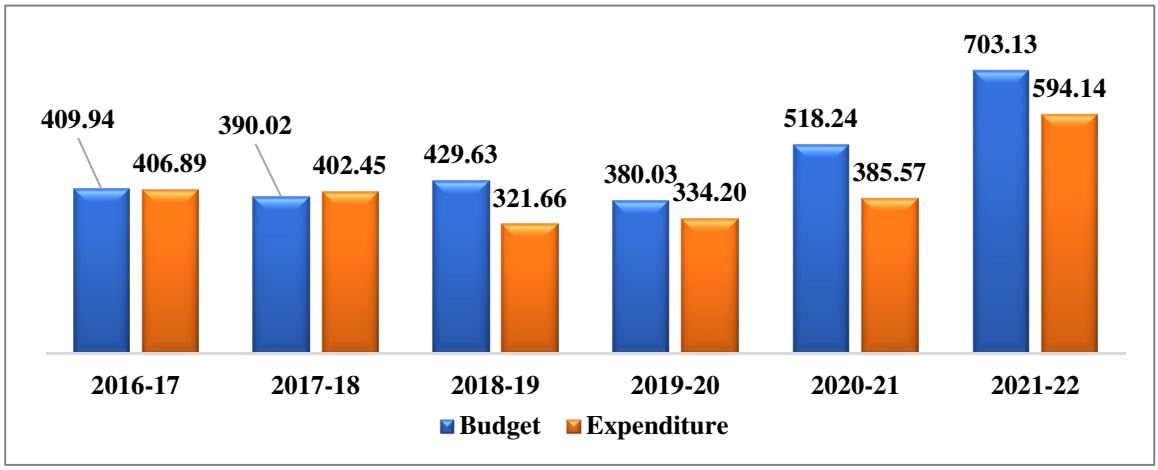
Chart 6.4: Savings trend during 2016-22



The percentage of utilisation of budget during 2016-17 to 2021-22 showed a mixed trend and was lowest in 2020-21. This indicated that the State has not made realistic assessment before preparing the funds requirement in the budget for the health sector.

Chart 6.5: Budget Allocation and Expenditure of GoI share

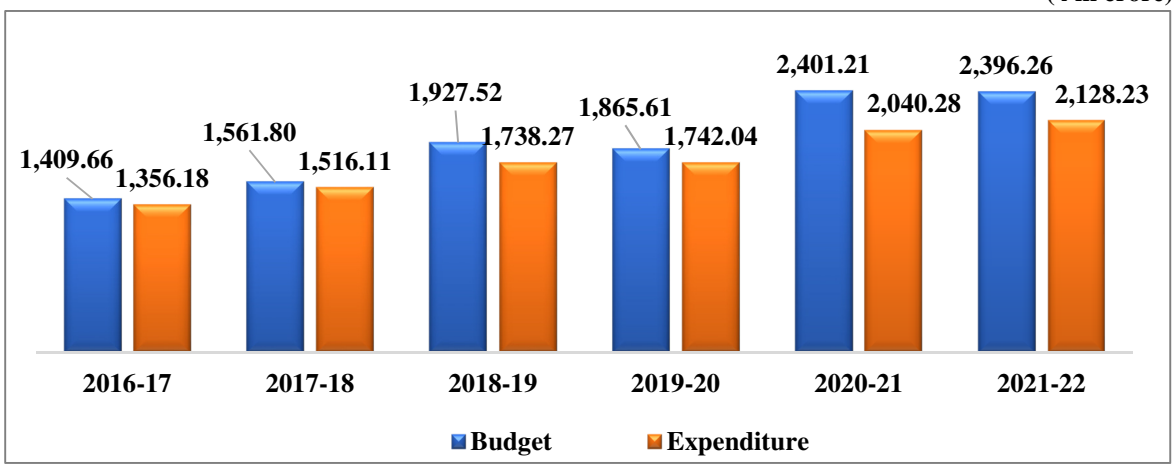
(₹ in crore)



Source: Data provided by Department

Chart 6.6: Budget & Expenditure of State share

(₹ in crore)



Source: Data provided by Department

- From **Table 6.3**, it was noticed that there was a total unspent budget of ₹ 1,427.03 crore (9.91 *per cent*) (GOI[1] - ₹ 386.08 crore and State - ₹ 1,040.95 crore[2]) during 2016-22.
- There was excess expenditure of ₹ 12.43 crore during 2017-18 under Central share by Director Health and Family Welfare.
- It was observed that there was variation in figures of budget allocation (₹ 990.39 crore[3]) and expenditure (₹ 543.18 crore[4]) as per data supplied by the Directorate and E-kosh (online treasury data of the State Government) of Treasury and Accounts. Reasons for the variation of data, surrender of savings and excess expenditure were not furnished by the Directorate (September 2022) though called for.
- On being enquired about the basis of budget estimation, the Department stated (August 2022) that there is no practice of assessing gap identification in HIs on various aspects. It was further stated that while preparing budget estimates, proposals are sought from CMOs concerned for their districts, Medical Superintendents, Zonal Leprosy Officers and Principals of Training Centres. In those cases where proposal is not received, the estimate is prepared by increasing the estimate by 10 *per cent* over the previous year's expenditure. The Department was, however, unable to produce demands received from the districts for 2016-17 to 2019-20.

It was also seen in audit that no demand for budget was sent by CMO Kangra during 2016-19, CMO Solan during 2016-20 and CMO Kinnaur during 2016-21. Thus, it is clear that the budget was prepared by the DHS without accurate estimation of requirements.

6.5 Utilisation of funds

6.5.1 Revenue and Capital Expenditure

Revenue expenditure includes establishment expenses, Grants-in-aid to various institutions, expenditure on training programmes, immunisation programmes, family planning programmes, various schemes/programmes of the State/Central Government, assistance to other non-government institutions, purchase of medicines, etc.

Capital expenditure includes construction/major repair of buildings of health institutions, acquisition of land etc.

Out of the total expenditure of ₹ 12,422.85 crore (as per E-kosh data) incurred on health during 2016-22, revenue expenditure was ₹ 10,779.72 crore (87 *per cent*) while capital expenditure was ₹ 1,643.13 crore (13 *per cent*).

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1 DHS: ₹ 229.96 crore DMER: ₹ 156.12 crore

2 DHS: ₹ 530.19 crore, DDH ₹ 19.76 crore, DMER: ₹ 490.37 crore and DHSR ₹ 0.63 crore

3 Allocation for the year 2016-22 for all directorates (DHS, DMER, DHSR and DDH): ₹ 14,393.05 crore, as per E-kosh ₹ 13,402.66 crore,

4 Expenditure for the year 2016-22 for all directorates (DHS, DMER, DHSR and DDH): ₹ 12,966.02 crore, and as per E-kosh ₹ 12,422.84 crore

Table 6.4: Details of Revenue and Capital Expenditure

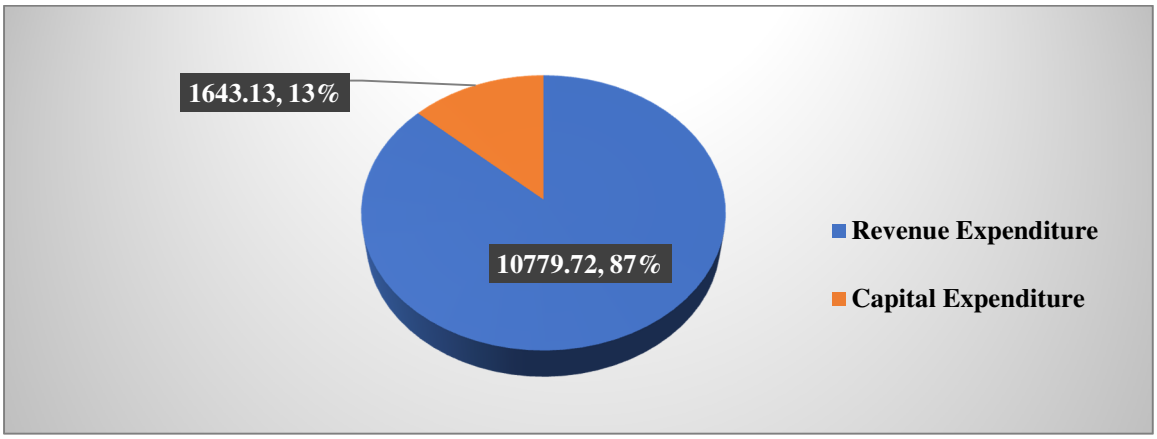
(₹ in crore)

Year	Revenue			Capital		
	Allocation	Expenditure	(-) Saving/ (+) Excess (in *per cent*)	Allocation	Expenditure	(-) Saving/ (+) Excess (in *per cent*)
2016-17	1,325.70	1,321.99	-3.71 (-0.28)	273.36	270.84	-2.52(-0.92)
2017-18	1,540.90	1,542.11	+1.21(+0.08)	249.62	248.64	-0.98(-0.39)
2018-19	1,688.40	1,681.43	-6.97(-0.41)	335.64	334.89	-0.75(-0.22)
2019-20	1,850.05	1,850.05	0.00	221.29	221.29	0.00
2020-21	2,415.85	2,014.07	-401.78(-16.63)	401.30	287.68	-113.62(-28.31)
2021-22	2,790.23	2,370.07	-420.16(-15.06)	310.32	279.79	-30.53(9.84)
Total	**11,611.13**	**10,779.72**	**-831.41(-7.16)**	**1,791.53**	**1,643.13**	**-148.40(-8.28)**

Source: E-kosh data of the respective year

Chart 6.7: Details of Revenue and Capital Expenditure

(₹ in crore)



As seen from **Table 6.4**, revenue expenditure increased over the years while capital expenditure increased till 2018-19 and then showed a declining trend. Expenditure for the period 2016-22 comprised 87 *per cent* under revenue head and 13 *per cent* under capital head. The component-wise expenditure is discussed in the succeeding paragraph.

6.5.2 Component-wise utilisation of funds

Component-wise expenditure incurred on healthcare by all the Directorates as per E-kosh during 2016-22 is shown in **Table 6.5**.

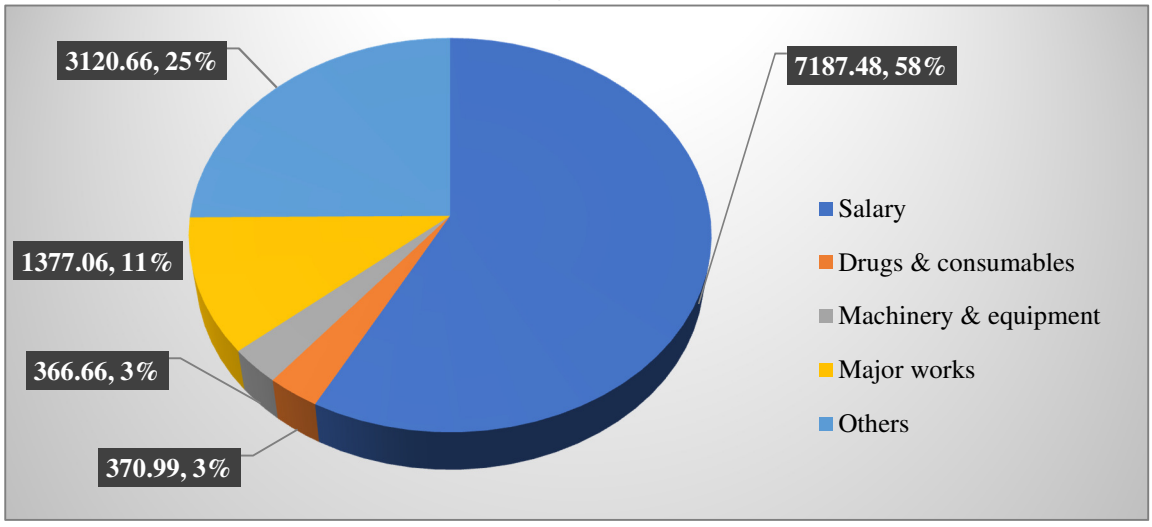
Table 6.5: Component wise expenditure incurred on healthcare for the State as a whole (₹ in Crore)

Year	Total Expenditure	Salary[5]	Drugs & Consumables	Machinery & Equipment	Major works	Other
2016-17	1,592.83	955.95 (60.02)	39.89 (2.50)	21.98 (1.38)	270.84 (17.00)	304.17 (19.10)
2017-18	1,790.75	1,083.09 (60.48)	49.68 (2.77)	34.01 (1.90)	245.68 (13.72)	378.29 (21.12)
2018-19	2,016.32	1,182.94 (58.67)	79.94 (3.96)	174.90 (8.67)	176.19 (8.74)	402.35 (19.95)
2019-20	2,071.34	1,246.83 (60.19)	77.05 (3.72)	50.26 (2.43)	184.03 (8.88)	513.17 (24.77)
2020-21	2,301.75	1,312.59 (57.03)	48.65 (2.11)	48.06 (2.09)	245.41 (10.66)	647.04 (28.11)
2021-22	2,649.86	1,406.08 (53.06)	75.78 (2.86)	37.45 (1.41)	254.91 (9.62)	875.64 (33.04)
Total	**12,422.85**	**7,187.48 (57.86)**	**370.99 (2.99)**	**366.66 (2.95)**	**1,377.06 (11.08)**	**3,120.66 (25.12)**

Source: as per E-kosh data of treasury and accounts of HP, Figures in brackets indicate percentage

[5] Salary, Wages, Travel Expenses, Liveries, Medical Reimbursement, GIA Salary, Remuneration to out-sourced staff

Chart 6.8: Component-wise expenditure incurred on healthcare in the State as whole during 2016-22



It can be seen from **Table 6.5** & **Chart 6.8** that:

- A major portion of expenditure was incurred on salary and general establishment during 2016-22, which constituted 58 *per cent* of the total expenditure.
- On machinery and equipment, though there was an increase in expenditure as compared to 2016-17, there was a sharp increase from ₹ 34.01 crore in 2017-18 to ₹ 174.90 crore in 2018-19. The increase was mainly attributed to establishment of four[6] medical colleges during the period 2016-18, of which funds amounting to ₹ 150.99 crore out of ₹ 174.90 crore were released to three colleges (YSPGMC Sirmaur- ₹ 49.95 crore, JLNGMC Chamba - ₹ 49.84 crore & RKGMC Hamirpur - ₹ 51.20 crore) during 2018-19. The decreasing trend started from 2018-19 onwards, although it was observed that in the selected districts, there was shortfall in availability of equipment in district hospitals (DH) and in CHs as discussed in Chapter IV (**Para 4.9.1**).
- On drugs and consumables, there was an overall increase of 89.97 *per cent* in expenditure from 2016-17 to 2021-22. However, a decline of 36.86 *per cent* in expenditure was noticed during 2019-20 to 2020-21. Average shortfall in availability of drugs and consumables was also noticed in selected health institutions (DH/CMO-42 to 80 *per cent*, CH- 55 to 92 *per cent* and CHC- 60 to 85 *per cent*) which is discussed in Chapter IV- Drugs, Equipment and other consumables (**Para 4.1.1** to **Para 4.1.7**).

6.6 Budget and Expenditure for selected districts (GoI and State)

In the selected districts, year-wise allotment and expenditure of funds during 2016-22 pertaining to the Department of Medical Health and Family Welfare is shown in **Table 6.6**.

[6] YSPGMC Sirmaur (2016), JLNGMC Chamba (2017), SLBGMC Mandi (2017) & RKGMC Hamipur (2018)

Table 6.6: Budget & Expenditure of selected districts

(₹ in crore)

Year	Kinnaur		Solan		Kangra		Total		
	Budget	Exp.	Budget	Exp.	Budget	Exp.	Budget	Exp.	Savings (*per cent*)
2016-17	15.53	17.07	76.93	64.84	117.78	106.68	210.24	188.59	10.30
2017-18	15.17	16.64	67.46	64.01	107.71	103.57	190.34	184.22	3.22
2018-19	19.21	18.21	79.49	74.62	126.66	120.95	225.36	213.78	5.14
2019-20	20.24	20.89	85.50	78.98	171.45	164.60	277.19	264.47	4.59
2020-21	19.61	19.56	80.80	74.70	203.88	169.27	304.29	263.53	13.40
2021-22	24.99	24.52	78.92	72.49	213.32	195.92	317.23	292.93	7.66
Total	**114.75**	**116.89**	**469.10**	**429.64**	**940.80**	**860.99**	**1,524.65**	**1,407.52**	**7.68**

Source: CMO Kinnaur, CMO Solan and CMO Kangra (Health and Family Welfare) including DH

From **Table 6.6**, it is observed that:

- Of the three districts, in Kinnaur the expenditure was more than the budget during the years 2016-17, 2017-18 and 2019-20. The expenditure was met by re-appropriating funds from other heads.
- The expenditure in three districts increased by 55.33 *per cent* (Kinnaur- 43.64, Solan-11.80 and Kangra-83.65) in 2021-22 as compared to 2016-17.
- Mixed trend of savings was seen ranging between 3.22 *per cent* and 13.40 *per cent* during 2016-22 (Kinnaur 1.88 *per cent* in 2021-22, Solan between 5.11 *per cent* - 15.72 *per cent* and Kangra between 3.84 *per cent* – 16.98 *per cent*).

6.6.1 Component wise expenditure incurred on healthcare by all the selected districts

In the selected districts as shown in **Table 6.7**, it was observed that 79 *per cent* of the expenditure was incurred on salary; four *per cent* on procurement of drugs and consumables, one *per cent* on equipment, nine *per cent* on major works and seven *per cent* towards 'Other' which comprised items like office expenditure, motor vehicles, referral services, Grants-in Aid, minor works and repair and maintenance.

Table 6.7: Component wise expenditure in selected districts during 2016-22 (₹ in crore/ *per cent*)

Year	Total Expenditure	Salary (*per cent*)	Drugs & Consumables (*per cent*)	Equipment (*per cent*)	Major works (*per cent*)	Other (*per cent*)
2016-17	188.59	157.99 (84)	7.61 (4)	1.47 (1)	14.31 (8)	7.21 (4)
2017-18	184.22	156.40 (85)	8.16 (4)	1.96 (1)	10.86 (6)	6.84 (4)
2018-19	213.78	168.69 (79)	12.99 (6)	2.37(1)	21.95 (10)	7.78 (4)
2019-20	264.47	209.03 (79)	12.86 (5)	6.68 (3)	26.24 (10)	9.66 (4)
2020-21	263.53	211.60 (80)	5.54 (2)	0.61 (0)	22.09 (8)	23.69 (9)
2021-22	292.93	204.21(70)	6.10(2)	2.14(0)	28.34(10)	52.14(18)
Total	**1,407.52**	**1,107.92 (79)**	**53.26 (4)**	**15.23(1)**	**123.79 (9)**	**107.32 (7)**

Source: Departmental figures

6.7 Audit findings

6.7.1 Budget control

6.7.1.1 Irregular drawal of funds from treasury without immediate requirement

Rule 2.10(b) 5 of the Himachal Pradesh Financial Rules (HPFR), 1971 Vol. I provides that no money should be drawn from the treasury unless it is required for immediate disbursement and that advances cannot be drawn from the treasury for the execution of works, the completion of which is likely to take a considerable amount of time.

Audit noticed that ₹ 7.88 crore was drawn by five DDOs between March 2017 and March 2020 and the amount was not immediately disbursed but was kept in the shape of demand draft/savings bank accounts in respect of the test checked HIs as shown in **Table 6.8**.

Table 6.8: Statement showing details of fund drawn from treasury without immediate requirement

Sl. No.	Name of the DDO	Amount drawn from the treasury (in lakh)	Purpose for withdrawal	Date of withdrawal	Period of release of payment	Remarks
1	CMO Kangra	420.20	Installation of STPs	31/03/2020	6-15 months	The amount was drawn from treasury and kept in the shape of demand drafts/ banker's cheques and subsequently released to firms.
2	CMO Kinnaur	43.50	Installation of STPs	March 2020	9-12 months	The amount was kept in the shape of demand draft after drawing from the treasury
3	TBS Dharampur	18.00	Installation of STPs	March 2020	16 -17 months	Amount was kept in savings bank account
4	RPMC Kangra	155.00	Intramural Research Grant	March 2017 to March 2019	₹ 13.41 lakh was advanced to five Assistant Professors of different departments	Amount was kept in savings bank account from March 2017 to June 2020 and thereafter, the balance amount of ₹125.00 lakh was transferred to Director, DMER Shimla
5	Principal IGMC Shimla	151.00		March 2017 to March 2019	₹ 13.27 lakh was spent for various activities and purchase of kits for research work as of January 2023	₹151.68 lakh (including interest ₹ 13.95 lakh) was lying unutilised in the savings bank account upto January 2023. The reason quoted for non-utilisation was non-recruitment of required staff.
	Total	**787.70**				

Source: Information provided by institutions

On being pointed out, CMO Kinnaur stated (October 2021) that the STP work was not completed due to Covid-19 pandemic and blocking of roads in the winter season etc., while CMO Kangra stated (December 2021) that funds were drawn as the budget was allotted. The replies were not acceptable as funds were drawn from the treasury without immediate requirement in violation of Rule 2.10(b) 5 of HPFR.

6.7.1.2 Non-surrender of unspent budget

As per Rule 41 of HPFR 2009, Heads of Departments of the State Government, through their Administrative Department, shall surrender to the Finance Department, by the dates prescribed by the Finance Department before the close of the financial year, all the anticipated savings noticed in the Grants or Appropriations controlled by them.

- Audit noticed that there was overall unspent budget of ₹ 1,427.03 crore under State and GOI share during 2016-22 in four directorates (DHS, DMER, DDH and DHSR). Further in 10[7] test-checked units, there was unspent budget of ₹ 193.91 crore, mainly under the salary head, for the period 2016-22, which was not surrendered timely. There was a practice of sending the excess and surrender statement after the close of the financial year, which was against the financial rules. However, the surrender of fund was not done as per rules.
- In Government Dental College Shimla, it was noticed that during the year 2016-17, budget provision for ₹ 0.20 crore was made by the State Government for construction of hostel and other infrastructure for the students and staff of the Dental College. Subsequently during 2017-18, budget provision of ₹ two crore was made for the said work. Due to non-availability of land, no expenditure could be incurred on the project. However, the office did not surrender the budget during 2016-17 and 2017-18.

In reply it was stated by the Principal, Dental College (August 2022) that there was a practice for surrender of the budget after the close of the financial year. The reply was not acceptable as surrender of budget was required to be made as per financial rules and the practice followed was in contravention of the Rules.

6.7.1.3 Unutilised funds

In Rajendra Prasad Government Medical College (RPGMC) Kangra, an amount of ₹ 37.40 lakh received from the Deputy Commissioner Kangra under MPLAD for five works[8] was lying unutilised due to non-finalisation of tender and pending permission for utilisation for other purposes (purchase of equipment). The amount had been kept in savings bank account for more than 24-34 months (August 2019 to May 2022).

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7 Training Institute Cheb Kangra: ₹ 1.63 crore (2016-22), BMO Jawalamukhi; ₹ 2.13 crore (2016-21), CH Baijnath: ₹ 0.91 crore (2016-21), BMO Mahakal: ₹ 6.05 crore (2016-22), CMO Kangra: ₹ 2.94 crore (2016-21), DH Kangra: ₹ 10.03 crore (2016-21), RPGMC Kangra: ₹ 23.12 crore (2016-22) IGMC: ₹ 108.51 crore (2016-22) and CMO Solan ₹ 23.39 crore (2016-21) and Dental College Shimla ₹ 15.20 crore (2016-22)

8 Installation of 25 No. Sevi Fowler beds (May 2020) ₹ 5.00 lakh, Installation of 50 ordinary beds (May 2020) ₹ 2.40 lakh, Purchase of one ventilator (November 2019) ₹ 10.00 lakh and Purchase of two ventilators ₹ 20.00 lakh

6.7.2 Receipt controls

6.7.2.1 Non-deposit of Government revenue to State treasury

Rule 3 of HP Financial Rules 2009 provides that all moneys received by or on behalf of the Government either as dues of the Government or otherwise for deposit, remittance, and withdrawal there from, shall be brought into government account immediately.

Audit noticed that the Directorate of Health Safety & Regulation, IGMC Shimla, RPGMC Kangra and Dental college had not deposited the accumulated revenues for the period 2016-22 amounting to ₹ 52.01 crore (Health safety[9]: ₹ 5.69 crore, Tuition fee: IGMC Shimla - ₹ 18.27 crore, RPGMC Kangra - ₹ 22.01 crore and Dental College, Shimla- ₹ 6.04 crore) into government account. The authorities of the Directorate had not obtained any permission/order from the Finance Department for retaining the above revenues.

In reply, the Dental College stated (August 2022) that permission for deposit of tuition fee in the society account was granted by the Additional Secretary, Health to the Government of HP during January 2007.

DHS&R stated (November 2021) that Health Safety and Regulation Society Governing Body had decided to retain the amount after the approval/decision of the Governing Body.

In the Exit Conference it was stated by the Secretary (Health) to the Government of H.P. that tuition fee was deposited in Rogi Kalyan Samiti (RKS) fund and immediate day-to-day expenditure was met from RKS fund. Further, the notification from the Health Department has been issued after the concurrence of the Finance Department for depositing of tuition fee in RKS account.

The Government in its reply (January 2024) stated that as per the decision taken at Government level during January 2012, student fee was to be kept in separate account and the same was to be used for the students' welfare activities. The reply was not acceptable as legislative concurrence for keeping Government revenue out of Government account was not taken.

6.7.2.2 Delay in depositing user charges

Rogi Kalyan Samities (RKSs) were introduced in 2005 under the National Rural Health Mission (NRHM) as a forum to improve the functioning and service provision in public health facilities, increase participation and enhance accountability. As per provisions given in the RKS guidelines, user charges collected from the patients on account of various tests/treatment etc. are required to be deposited into the bank on the same day or next working day.

- Audit noticed that in four test-checked HIs[10], user charges of ₹ 8.43 lakh were deposited belatedly in the bank account of RKS with delays ranging between two and 317 days, in violation of the rules *ibid*.

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9 Accumulated revenues of interest, license/registration fees, penalties, fines received for food/drug license, registration fees.

10 Kinnaur: ₹ 3.86 lakh, CH Thural: ₹ 2.21 lakh, CH Jawalamukhi: ₹ 0.83 lakh, CH Shahpur: ₹ 1.53 lakh

- In CH Baijnath, it was noticed that during 2016-18, the amount collected on account of user charges under RKS was not deposited in the bank account. Instead, every month the balance was kept as cash in hand, which was against the RKS guidelines.

6.7.2.3 Suspected embezzlement of RKS fund collected on account of user charges

It was noticed from the records of RKS, Civil Hospital Shahpur, Kangra that the user charges collected were initially retained by the cashier/collector for almost eight-10 days and subsequently deposited with the dealing hand of RKS. The dealing hand used to deposit the accumulated amount in the bank account of RKS. There was a practice in the Hospital for not depositing the entire receipts on the next working day, as in some instances it was noticed that the amount was deposited after incurring expenditure out of the receipts. Further, no proper system of depositing the user charges in the bank account existed and as per the cash book for the month of December 2021, an amount of ₹ 2.13 lakh on account of user charges was lying in as "cash in hand" and the same was not deposited in bank since a long time. The period for which this amount which was pending for deposit pertains, was neither shown in the cash book nor in the records.

Audit compared the user charges collected by the cashier as per his/her register with the bank statement for the period April 2016 to February 2022 and it was noticed that the whole amount was not deposited in the bank account. As per the comparison made by Audit with reference to the amount deposited in the savings bank account and user charges collection register, there was short deposit of user charges amounting to ₹ 20.72 lakh as detailed in Table 6.9.

Table 6.9: Details of less deposit of user charges

(₹ in lakh)

Year	User charges collected as per collection register	Amount deposited in savings bank account	Expenditure incurred out of receipt	Balance
2016-17	7.10	1.55	0	5.55
2017-18	7.62	0.96	0	6.66
2018-19	8.27	1.79	1.94	4.54
2019-20	13.67	8.32	0	5.35
2020-21	10.00	11.38	0	-1.38 (excess deposit due to deposit of user charges of previous years)
2021-22 (Feb-22)	5.09	5.09	0	0
Total	**51.75**	**29.09**	**1.94**	**20.72**

Thus, the balance available should have been ₹ 20.72 lakh, while only ₹ 2.13 lakh was reflected in the cash book. The balance amount remained unaccounted for.

In reply, BMO Shahpur stated (September 2022) that CMO Kangra had instituted an enquiry for the suspected embezzlement.

In the Exit Conference (January 2023) the Secretary (Health) stated that the issue will be looked into and necessary action would be taken.

6.7.2.4 Non-deduction of performance security and security deposit

Para No. 11 of the MOU executed between DHS and two firms[11] for installation of Sewerage Treatment Plants (STPs) in the State provided that five *per cent* performance security and five *per cent* security deposit was to be deducted from due payments, which shall be released after six months from the date of completion of the project.

It was noticed in audit that CMO Kangra, CMO Solan and CMO Kinnaur, had not deducted the performance security and security deposit amounting to ₹ 0.53 crore[12] (five *per cent* performance security and five *per cent* security deposit) at the time of making the payment of ₹ 5.27 crore[13] to the firms on account of installation and commissioning of STPs. This was in contravention of the provisions of the MOU.

In reply, CMO Kinnaur assured (October 2021) to follow the procedure in future, CMO Solan stated (January 2022) that the amount was not deducted due to oversight, however, the same would be deducted in future. No reply was offered by CMO Kangra.

Non-deduction of security deposit and performance security was not only an undue favour to the executing agencies, but also compromised the Department's ability to safeguard against default by the agencies during execution of the work.

6.7.3 Expenditure Controls

6.7.3.1 Rush of expenditure

The State Government with the aim of regulating the expenditure in a phased manner prescribed quarter-wise expenditure[14] targets.

Audit noticed that as per E-kosh data, expenditure was in the following ranges.

State level:

The range of quarter-wise expenditure percentages for the period 2016-22 is mentioned in **Table 6.10.**

Table 6.10: Range of quarter-wise expenditure percentages for 2016-2

(in *per cent*)

Quarter	Limit	DHS	DMER	DDH	DHSR
1st Quarter	20	13 to 26	12 to 19	24 to 26	5 to 25
2nd Quarter	25	23 to 33	14 to 23	22 to 26	13 to 51
3rd Quarter	30	20 to 31	15 to 24	24 to 27	5 to 49
4th Quarter	25	28 to 35	36 to 59	24 to 29	20 to 75
March		14 to 23	20 to 49	8 to 11	4 to 19

Source: Departmental records

It can be seen from **Table 6.10** that in DMER, the expenditure during the fourth quarter was 36 *per cent* or more, in which 20 *per cent* or more of total expenditure was incurred in the month of March indicating rush of expenditure.

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11 M/s Bansal Construction Company Gurugram, Anushka Builder Lucknow

12 Kangra ₹ 46.04 lakh, Solan ₹ 2.27 lakh and Kinnaur ₹ 4.35 lakh

13 Kangra ₹ 460.44 lakh, Solan ₹ 22.75 lakh and Kinnaur ₹ 43.50 lakh

14 1st quarter-20 *per cent*; 2nd quarter-25 *per cent*; 3rd quarter-30 *per cent*; 4th quarter-25 *per cent*

Selected CMOs/BMOs[15]:

During 2016-22, in the first quarter, *per cent* expenditure range was five to 31, 2nd quarter range was 20-35, 3rd quarter range was 17-30, 4th quarter was 22-37 and in March, the range was three to 26 *per cent*.

From **Table 6.10**, it can be seen that DMER and DHS had incurred expenditure in the range of 14 to 49 *per cent* in the month of March during 2016-22, which shows rush of expenditure at the end of the financial year.

6.7.3.2 Irregular parking of NHM funds in the current bank account

As per GOI guidelines issued during June 2014, bank accounts for all NHM funds should be kept in savings accounts in the scheduled commercial banks.

Funds of ₹ 94.79 lakh received during 2016-2021 (minimum observed balance in Kinnaur District during March 2018 to July 2021 was ₹ 49.22 lakh and in Solan during June 2016 to September 2021 was ₹ 45.57 lakh) were irregularly parked in the current bank account by the CMO Kinnaur and CMO Solan during this period.

6.7.3.3 Reconciliation with the treasury

Reconciliation with the treasury was not conducted during 2016-21 as required in HPFR 2009 rules in any of the test checked HIs of Kangra, Solan and Kinnaur District.

6.8 Internal audit

It was noticed that in the Health Department, there was no system of internal audit despite having 19 Assistant Controllers and four Section Officers (Finance & Accounts) under DHS.

The DHS in reply stated (November 2021) that there is no internal audit mechanism in the Health Department, which was also accepted by the Department during the exit conference.

6.9 Conclusion

The expenditure of the Health and Family Welfare Department did not meet the target set under the National Health Policy for any of the years. Though the funds allocated were less than envisaged, the absorptive capacity of the State was not adequate. There was persistent saving of funds under the State budget and also funds under NHM indicating there was still scope to increase the spending on health services. The mechanism for collection and depositing user charges into RKS funds was not robust.

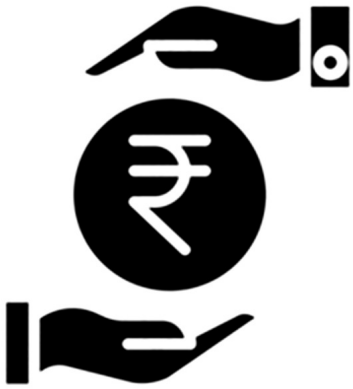
[15] CMOs: Kinnaur, Kangra, Solan BMOs: Jawalamukhi, Mahankal, Shahpur, Thural

6.10 Recommendations

Government should take steps to:

- *Increase budget allocation on health services in line with the guidelines of National Health Policy.*
- *Review the healthcare ecosystem in the State to identify the constraints/factors adversely impacting the absorptive capacity of funds and make concerted efforts for their resolution.*
- *Prepare budget estimates keeping in view bottom up/systematic approach by obtaining demand assessment from the field offices.*
- *Ensure funds are released for capital works only after ensuring completion of statutory and codal formalities*.

CHAPTER-VII
CENTRALLY SPONSORED SCHEMES



Chapter VII: Centrally Sponsored Schemes

7.1 Allocation and Expenditure under National Health Mission (NHM)

Finances for health infrastructure and management of health services in the State were sourced through the State budget, National Health Mission (NHM) and other schemes of the Government of India.

The expenditure under NHM was 19.46 *per cent* of the total expenditure on health in the State during 2016-22.

7.1.1 Funding under NHM

The funds received and expenditure incurred under NHM for 2016-22 is given in **Table 7.1**.

Table 7.1: Details of receipt and expenditure in National Health Mission

(₹ in crore)

Year	Opening Balance	Interest Earned	Central Government Receipt (*per cent*)	State Government Receipt (*per cent*)	Total Funds	Expenditure	Closing/ Unutilised Balance (*per cent*)
	1	2	3	4	5= (1+2+3+4)	6	7 =5-6 (7/5x100)
2016-17	86.80	9.78	207.00 (89.91)	23.23 (10.09)	326.81	255.60	71.21 (21.79)
2017-18	71.21	3.83	329.48 (88.25)	43.86 (11.75)	448.38	347.85	100.53 (22.42)
2018-19	100.53	3.55	320.58 (85.65)	53.73 (14.35)	478.39	385.35	93.04 (19.45)
2019-20	93.04	3.96	493.71 (88.64)	63.25 (11.36)	653.96	545.97	107.99 (16.51)
2020-21	107.99	4.61	478.21 (84.87)	85.22 (15.13)	676.03	501.02	175.01 (25.89)
2021-22	175.01	4.02	881.93 (89.93)	98.79 (10.07)	1159.75	767.03	392.72 (33.86)
Total		**29.75**	**2,710.91 (88.05)**	**368.08 (11.95)**		**2,802.82**	

Source: Mission Director, NHM.

During 2016-22, 16.51 *per cent* to 33.86 *per cent* of the available funds remained unutilised.

7.1.2 Funding under NHM in the selected Districts

The position of funds received and expenditure under NHM in the selected districts (Kinnaur, Solan and Kangra) is shown in **Table 7.2**:

Table 7.2: Details of funds received and expenditure under NHM in the selected districts

(₹ in crore)

Year	Opening Balance	Receipt	Interest	Total Funds	Expenditure	Closing Balance	Unutilised funds (*per cent*)
2016-17	8.6	31.5	0.39	40.49	28.63	11.86	29.29
2017-18	11.86	33.81	0.41	46.08	32.92	13.16	28.56
2018-19	13.16	40.19	0.44	53.79	40	13.79	25.64
2019-20	13.79	41.91	0.4	56.1	43.15	12.95	23.08
2020-21	12.95	43.85	0.9	57.7	54.1	3.6	6.24
2021-22	3.6	42.58	0.05	46.23	31.44	14.79	31.99
Total		**233.84**	**2.59**		**230.24**		

Source: Data supplied by the selected districts.

During 2016-22, 6.24 *per cent* to 31.99 *per cent* of the available funds remained unutilised in the selected districts.

7.2 Selected Schemes under NHM

Under the National Health Mission, out of 23 schemes/components, six components shown in **Table 7.3** were selected by Audit for examining funding and expenditure.

Table 7.3: Showing details of funds allocation and expenditure for six selected schemes

(₹ in crore)

Sl. No.	Name of the scheme**	2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		Total	
		A*	E*	A	E	A	E	A	E	A	E	A	E	A	E
1.	RCH	58.87	73.08	48.02	45.90	44.32	52.75	53.46	54.68	58.25	46.86	63.91	71.85	**326.83**	**345.12**
2.	RI/ IPPI	7.15	5.41	6.17	9.17	6.27	5.25	6.24	4.53	6.01	4.00	5.85	5.91	**37.69**	**34.27**
3.	NTCP(TB)	5.84	7.24	11.09	5.84	13.33	13.30	11.92	11.41	13.79	11.23	9.18	17.03	**65.15**	**66.05**
4.	HSS	110.05	121.93	176.55	158.33	204.05	212.83	236.65	248.80	274.06	232.73	327.98	364.86	**1329.34**	**1339.48**
5.	Covid-19	0.00	0.00	0.00	0.00	0.00	0.00	22.75	0.00	66.11	59.49	358.95	96.93	**447.81**	**156.42**
6.	IM	42.99	42.99	124.13	124.13	97.06	97.06	221.71	221.71	143.57	143.57	201.89	201.89	**831.35**	**831.35**
Total		**224.90**	**250.65**	**365.96**	**343.37**	**365.03**	**381.19**	**552.73**	**541.13**	**561.79**	**497.88**	**967.76**	**758.47**	**3038.17**	**2772.69**

*Source: Mission Director, NHM. *A-Allocation, E- Expenditure.*

***RCH- Reproductive and Child Health, RI-Routine Immunisation, IPPI-Integrated Pulse Polio Immunisation, NTCP- National TB Control Programme, HSS- Health System Strengthening, IM- Infrastructure Maintenance.*

Note: In addition to the above selected schemes, points pertaining to other GoI schemes that were observed during audit were also incorporated.

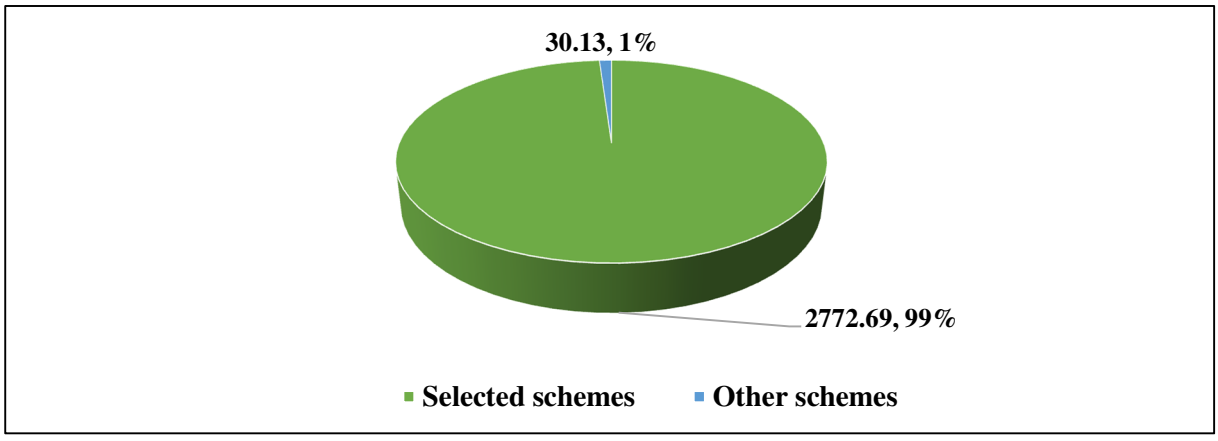
From **Table 7.3**, it can be observed that while there was excess expenditure of ₹ 29.33 crore under three schemes RCH (₹ 18.29 crore), NTCP (₹ 0.90 crore) and HSS (₹ 10.14 crore) during 2016-22, there was saving in the other two schemes RI (₹ 3.42 crore), and Covid-19 (₹ 291.39 crore) during the same period.

7.2.1 Comparison of expenditure in six selected schemes *vis-à-vis* total expenditure under NHM

Comparison of expenditure in the six selected schemes *vis-à-vis* total expenditure under NHM during 2016-22 is shown in **Chart 7.1**.

Chart 7.1: Total expenditure under NHM schemes

(₹ in crore)



From **Chart 7.1**, it can be seen that these six selected schemes contributed to 99 *per cent* of the expenditure under NHM.

7.3 Audit findings

7.3.1 Reproductive and Child Health (RCH)

Reproductive and Child Health (RCH) programme under the umbrella of Government of India's NHM aims to reduce social and geographical disparities in accessing quality reproductive, maternal, new-born, child and adolescent health services, along with focus on reducing maternal, new-born and child mortality.

7.3.1.1 Janani Suraksha Yojana (JSY) – Statewise position

Janani Suraksha Yojana (JSY) was introduced in April 2005 as a key intervention to enable women to access institutional deliveries and thereby to reduce maternal and neonatal mortality in the State. As per the Sustainable Development Goal-3 (SDG) targets for 2022, 90 *per cent* institutional deliveries or deliveries attended by the skilled birth attendants were to be ensured.

Details of institutional deliveries in the State during 2016-22 is shown in **Table 7.4**.

Table 7.4: Details of institutional deliveries in the State

Year	Pregnant women registered	Deliveries in public health institutions (*per cent*)	Deliveries in private health institutions (*per cent*)	Total institutional deliveries	Home deliveries	Total Deliveries	*Per cent* of institutional deliveries	Abortion	MTP (Medical termination of pregnancy)	Expenditure incurred under JSY (₹ in crore)
	A	B	C	D = B+C	E	F=D+E	G=(D/F)* 100	H	I	J
2016-17	1,21,493	65,809 (84.72)	11,865 (15.28)	77,674	11,886	89,560	86.73	9,716	3,294	5.20
2017-18	1,18,966	66,284 (84.36)	12,292 (15.64)	78,576	9,031	87,607	89.69	5,700	4,145	5.56
2018-19	1,12,553	67,510 (85.43)	11,518 (14.57)	79,028	8,391	87,419	90.40	7,650	5,199	6.06
2019-20	1,10,694	68,036 (82.92)	14,012 (17.08)	82,048	6,657	88,705	92.49	6,467	4,476	4.63
2020-21	1,11,417	64,535 (77.90)	18,305 (22.10)	82,840	7,540	90,380	91.66	5,011	3,205	4.37
2021-22	1,06,340	82,267* (77.36)		82,267	6,497	88,764	92.68	4,705	4,144	6.26
Total	**6,81,463**	**-**	**-**	**4,82,433**	**50,002**	**5,32,435**	**90.61**	**39,249**	**24,463**	**32.08**

Source: Figures as per Health Management Information System data, expenditure figures supplied by Mission Director, NHM.

** Separate data for public and private institutional deliveries not available.*

From **Table 7.4**, it can be seen that during 2016-22, out of the total 5,32,435 deliveries in the State, 90.61 *per cent* availed institutional deliveries in the health institutions. Thus, the SDG target of 90 *per cent* institutional deliveries by 2022 was achieved.

During the period 2016-22, expenditure of ₹ 32.08 crore was incurred on JSY.

7.3.1.2 Status of home deliveries, abortions and miscarriages in the State

Government of India considers "Skilled Birth Attendant" as a person who can handle common obstetric and neonatal emergencies, recognise when the situation reaches a point beyond his/her capability and refers the woman or the new-born to a First Referral Unit/appropriate facility without delay. The Government of India (GoI) has a commitment under its National Health Mission (NHM)/Reproductive and Child Health (RCH)-II

programme to ensure universal coverage of all births with skilled attendance, both at the institutional and at the community level and to provide access to emergency obstetric and neonatal care services for women and new-borns, and thereby restrict the number of maternal and new-born deaths in the country.

The details of home deliveries attended by Skilled Birth Attendant is detailed in **Table 7.5**.

Table 7.5: Details of home deliveries attended by Skilled Birth Attendant (SBA)

Year	Total Home deliveries	Home deliveries attended by SBA (*per cent*)	Home deliveries not attended by SBA (*per cent*)
2016-17	11,886	1,755 (14.77)	10,131(85.23)
2017-18	9,031	1,456 (16.12)	7,575 (83.88)
2018-19	8,391	1,130 (13.47)	7,261 (86.53)
2019-20	6,657	1,317 (19.78)	5,340 (80.22)
2020-21	7,540	1,410 (18.70)	6,130 (81.30)
2021-22	6,497	1,398 (21.52)	5,099 (78.48)

Source: Health Management Information System (HMIS).

From **Table 7.5**, it can be seen that during 2016-22, out of the total home deliveries, only 13.47 *per cent* to 21.52 *per cent* were attended by the skill birth attendants thereby compromising the health of both the mother and the child.

Table 7.6: Details of Abortions and MTPs in the State

Year	Total pregnant women registered	Number of Abortions	*Per cent* of abortion when compared with total pregnant women registered	MTP	*Per cent* of MTPs when compared with total pregnant women registered
2016-17	1,21,493	9,716	8.00	3,294	2.71
2017-18	1,18,966	5,700	4.79	4,145	3.48
2018-19	1,12,553	7,650	6.80	5,199	4.62
2019-20	1,10,694	6,467	5.84	4,476	4.04
2020-21	1,11,417	5,011	4.50	3,205	2.88
2021-22	1,06,340	4,705	4.42	4,144	3.90

Source: HMIS data.

From **Table 7.6**, it can be seen that during 2016-22 percentage of abortions and MTPs when compared with total pregnant women registered in the State ranged from 4.42 to eight *per cent* and 2.71 to 4.62 *per cent* respectively.

7.3.1.3 Institutional deliveries in the selected districts

The details of institutional deliveries (both public and private health institutions) in the three selected districts during 2016-22 is shown in **Table 7.7**.

Table 7.7: Details of institutional deliveries in the selected districts during 2016-22

Year	Kinnaur				Kangra				Solan				Total			
	Pregnant women registered	Total institutional deliveries	Home deliveries	*Per cent* of institutional deliveries	Pregnant women registered	Total institutional deliveries	Home deliveries	*Per cent* of institutional deliveries	Pregnant women registered	Total institutional deliveries	Home deliveries	*Per cent* of institutional deliveries	Pregnant women registered	Total institutional deliveries	Home deliveries	*Per cent* of institutional deliveries
2016-17	1,365	614	110	84.81	24,993	17,337	1202	93.52	12,603	6,473	857	88.31	38,961	24,424	2169	91.84
2017-18	1,265	463	64	87.86	23,495	17,218	716	96.01	13,264	6,662	579	92.00	38,024	24,343	1359	94.71
2018-19	1,212	420	75	84.85	22,691	17,155	555	96.87	12,890	7,324	494	93.68	36,793	24,899	1124	95.68
2019-20	1,154	424	77	84.63	21,820	17,916	365	98.04	12,769	8,510	308	96.51	35,743	26,850	750	97.32
2020-21	1,062	291	60	82.91	22,305	18,184	518	97.23	12,602	8,730	505	94.53	35,969	27,205	1083	96.17
2021-22	1,173	299	72	80.59	20,487	16,838	362	97.90	12,878	9,184	445	95.38	34,538	26,321	879	96.77
Total	**7,231**	**2,511**	**458**	**84.57**	**1,35,791**	**1,04,648**	**3,718**	**96.57**	**77,006**	**46,883**	**3,188**	**93.63**	**2,20,028**	**1,54,042**	**7,364**	**95.44**

From **Table 7.7**, it can be seen that during 2016-22 period, 220028 pregnant women were registered in the three selected districts, out of which average institutional deliveries ranging between 84.57 *per cent* and 96.57 *per cent* were conducted in the health institutions during the period. It was observed that the average institutional deliveries in Kinnaur District was lower (84.57 *per cent*) during the period 2016-22 as compared to the other two districts.

7.3.1.4 Non-payment of JSY benefits and delay in payment of benefit to the beneficiaries

Janani Suraksha Yojana (JSY) is a safe motherhood intervention under NHM being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional deliveries among the poor pregnant women. The scheme integrates cash assistance with delivery and post-delivery care. The cash incentive of ₹ 1,100 from December 2019 (earlier ₹ 700 in rural area and ₹ 600 in urban area) is given in the State for institutional delivery.

Audit noticed that in the three selected districts, cash incentive was not paid to 25,409 (51.40 *per cent*) JSY eligible beneficiaries during 2016-22 as per details given in **Table 7.8**.

Table 7.8: Details of JSY beneficiaries in the selected districts

(in numbers)

Year	Kinnaur			Kangra			Solan			Total		
	Eligible for JSY benefit	Benefit paid	Benefit not paid	Eligible for JSY benefit	Benefit paid	Benefit not paid	Eligible for JSY benefit	Benefit paid	Benefit not paid	Eligible for JSY benefit	Benefit paid	Benefit not paid
2016-17	614	538	76	4,581	2,557	2,024	2,747	1,449	1,298	7,942	4,544	3,398
2017-18	463	298	165	5,150	1,892	3,258	2,253	1,015	1,238	7,866	3,205	4,661
2018-19	420	214	206	5,605	2,844	2,761	2,274	1,006	1,268	8,299	4,064	4,235
2019-20	424	216	208	5,857	3,211	2,646	2,835	1,483	1,352	9,116	4,910	4,206
2020-21	291	428*	-137	5,731	2,353	3,378	3,036	1,553	1,483	9,058	4,334	4,724
2021-22	401	401	0	4,720	1,772	2,948	2,034	797	1,237	7,155	2,970	4,185
Total	**2,613**	**2,095 (80.18 *per cent*)**	**518 (19.82 *per cent*)**	**31,644**	**14,629 (46.23 *per cent*)**	**17,015 (53.77 *per cent*)**	**15,179**	**7,303 (48.11 *per cent*)**	**7,876 (51.89 *per cent*)**	**49,436**	**24,027 (48.60 *per cent*)**	**25,409 (51.40 *per cent*)**

Source: Data furnished by the CMOs.

**Excess was due to payment to 137 previous year beneficiaries.*

In reply CMO Kangra (November 2021) stated that non-payment of JSY benefits to the beneficiaries was due to their not being qualified for JSY benefits. CMO Solan (December 2021) stated that benefit was to be provided to BPL/SC/ST categories of beneficiaries for delivery in government hospitals. CMO Kinnaur (October 2021) stated that payment was delayed for the next financial year or not given due to families being migrants from Nepal.

In the selected health institutions, the following points were noticed by Audit:

- In BMO Syri, 331 out of 1,328 registered beneficiaries were not paid the cash assistance. In reply, it was stated that JSY beneficiaries' cases were received late and some deliveries were conducted in private institutes, while some deliveries resulted in abortions and still births. However, the fact remains that due to non-forwarding of JSY

cases timely by the field functionaries, the purpose of providing benefits to eligible beneficiaries was defeated.

- In BMO Thural, 24 out of the total 65 eligible beneficiaries were not paid the cash assistance during 2016-21.
- There was delay in payment of cash incentive to the beneficiaries ranging between 30 and 724 days in three out of eight selected BMOs, one out of three DHs and one out of three CMOs[1] during 2016-21. In BMO Thural and Jawalamukhi,186 cases of delayed payment were noticed.

In reply, the health institutions stated that delay in payment was due to non-forwarding of the cases by the field functionaries like ASHA or equivalent worker, designated staff of PHC, HSC, CHC etc.

In the Exit Conference (January 2023), the Secretary (Health) stated that new guidelines are being issued by NHM for payment of JSY benefit at the institution level to avoid delays in future.

7.3.1.5 Organisation of camps for serving in remote and underserved areas under RCH

The Mission Director, National Health Mission, Himachal Pradesh executed an MoU with M/s Akash Hospital, Delhi during October 2019 for holding of multispeciality surgical camps under RCH scheme to provide healthcare facility at doorstep to the rural population of the State. Further, Mission Director, NHM conveyed to eight CMOs (December 2019) to hold these camps in difficult and tribal areas.

The details of medical camps organised in the State during 2018-22 are shown in **Table 7.9**.

Table 7.9: Details of medical camps in the State

Year	Number of camps organised		Number of patients who attended the camps	Number of surgeries conducted	Expenditure incurred (₹ in crore)
	Target	Achievement			
2018-19	38	38	Data not provided	5,277	3.52
2019-20	31	18	12,669	3,865	3.36
2020-21	16	10	4,791	1,967	1.44
2021-22	16	16	12,688	3,915	1.92
Total	**101**	**82 (81.19 *per cent*)**	**30,148**	**15,024**	**10.24**

Source: Mission Director, NHM.

As seen from **Table 7.9**, during the period 2018-22, against the target of the number of camps to be organised, achievement was 81.19 *per cent*.

In the test-checked district Kangra, it was observed that camps were organised at the stations where civil hospitals (Indora, Jawalamukhi Baijnath, Dehra, Thural and Shahpur) existed. Few camps were organised where CHCs (Rajhoon and Gangath) existed. These stations did not fall under the category of difficult and tribal areas of the district. These camps should have been organised in difficult and tribal areas as conveyed by the Mission Director (December 2019). Civil hospital normally has specialised services and the patients dwelling

[1] BMOs Thural, Jawalamukhi and Syri; DH Solan; CMO Kinnaur.

in those areas can avail these facilities in the hospital. Therefore, these camps should have been organised in the remote and underserved areas of the State which are difficult and tribal areas as defined by the Government.

7.3.2 Routine Immunisation

The purpose of the programme is to reassert routine immunisation as the foundation for sustained decrease in morbidity and mortality from vaccine-preventable diseases across the life cycle of all individuals.

7.3.2.1 Position of immunisation in the State

Immunisation of children against preventable diseases has been the cornerstone of routine immunisation under universal immunisation programme.

Details of immunisation during 2016-22 in the State is shown in **Table 7.10**:

Table 7.10: Details of immunisation in the State

Year	Target for immunisation	Pentavalent- 1 (*per cent*)	Vitamin K birth dose (*per cent*)	BCG (*per cent*)	Measles (*per cent*)	Hepatitis-B (*per cent*)
2016-17	1,08,183	1,06,105 (98.08)	57,954 (53.57)	98,124 (90.70)	1,04,574 (96.66)	71,651 (66.23)
2017-18	1,12,000	1,04,316 (93.14)	54,075 (48.28)	93,294 (83.30)	50,886 (45.43)	72,320 (64.57)
2018-19	1,14,100	1,04,006 (91.15)	74,677 (65.45)	92,096 (80.72)	1,01,755 (89.18)	73,982 (64.84)
2019-20	1,15,000	1,01,319 (88.10)	75,526 (65.67)	90,906 (79.05)	99,982 (86.94)	74,583(64.85)
2020-21	1,15,000	1,02,699 (89.30)	74,898 (65.13)	92,430 (80.37)	1,00,642 (87.51)	74,457 (64.75)
2021-22	1,14,210	1,00,237 (87.77)	73,942 (64.74)	89,210 (78.11)	98,987 (86.67)	73,215 (64.11)

Source: Mission Director, NHM.

Against the target fixed by the Department for immunisation, shortfall ranged in case of Pentavalent-1 (two to 12 *per cent*), Vitamin K (35 to 52 *per cent*), BCG (nine to 22 *per cent*), Measles (three to 55 *per cent*) and Hepatitis-B (34 to 36 *per cent*).

7.3.2.2 Position of immunisation in the selected districts

Details of immunisation during 2016-22 in the selected districts (Kangra, Kinnaur and Solan) are shown in **Table 7.11**.

Table 7.11: Details of immunisation in the selected districts

Year	Targets of immunisation	Pentavalent-1 (*per cent*)	Vitamin K birth dose (*per cent*)	BCG (*per cent*)	Measles (*per cent*)	Hepatitis-B (*per cent*)
2016-17	32,902	33,403 (102)	Data not available	31,919 (97)	34,244 (104)	22,919 (70)
2017-18	33,807	32,966 (98)	16,898 (50)	31,950 (95)	23,612 (70)	22,923 (68)
2018-19	32,074	32,774 (102)	23,591 (74)	30,683 (96)	33,122 (103)	23,742 (74)
2019-20	31,746	32,497 (102)	23,577 (74)	30,096 (95)	32,646 (103)	23,502 (74)
2020-21	31,515	32,592 (103)	23,537 (75)	31,331 (99)	32,217 (102)	23,545 (75)
2021-22	32,307	31,676 (98)	22,227 (69)	29,142 (90)	32,053 (99)	22,189 (69)

Source: Mission Director, NHM.

Against the targets fixed by the Department for immunisation in the selected districts, shortfall was observed in Vitamin K (25 to 50 *per cent*) and Hepatitis B (25 to 32 *per cent*) while it was appreciably good in Pentavalent-1, BCG and Measles immunisation (except in the year 2017-18).

7.3.3 National Tuberculosis Control Programme (NTCP)

The Revised National TB Control Programme (RNTCP), erstwhile National Tuberculosis Control Programme (NTCP), based on the internationally recommended Directly Observed Treatment Short-course (DOTS) strategy, was launched in 1997 and expanded across the country in a phased manner.

In Himachal Pradesh, the details of expenditure on major components under RNTCP for 2016-22 is given in **Table 7.12**.

Table 7.12: Expenditure on major components under RNTCP

(₹ in lakh)

Sl. No.	Name of the components	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total	*Per cent* of total expenditure
1	Civil works	29.51	34.76	27.85	285.51	11.17	66.59	455.39	6.89
2	Laboratory Material	35.48	32.27	48.11	32.80	101.33	343.35	593.34	8.98
3	Training	41.42	23.28	17.62	28.78	20.09	21.37	152.56	2.31
4	Procurement of drugs	1.49	2.13	2.77	2.12	3.75	6.52	18.78	0.28
5	Procurement of equipment	4.66	0	3.72	2.77	46.47	69.36	126.98	1.92
6	Contractual Services	368.29	330.11	659.70	0	0	505.34	1,863.44	28.21
7	Procurement of vehicle	35.76	0	0	0	0	0	35.76	0.54
8	Supervision and Monitoring	30.04	3.44	15.61	25.64	21.15	27.58	123.46	1.87
9	Vehicle Maintenance	36.52	35.10	43.82	33.90	40.22	41.83	231.39	3.50
10	Honorarium	18.83	55.58	357.67	638.51	669.64	60.35	1,800.58	27.26
11	Others	121.76	67.85	153.12	91.07	209.05	561.24	1,204.09	18.23
Total		**723.76**	**584.52**	**1,329.99**	**1,141.10**	**1,122.87**	**1,703.53**	**6,605.77**	

Source: Mission Director, NHM.

As seen from **Table 7.12**, major expenditure was incurred on contractual services and honorarium during the period 2016-22.

The details of TB patients identified during 2018-22 are detailed in **Table 7.13**.

Table 7.13: TB patients identified in the State

Year	Total number of TB patients identified during the year
2018-19	16,820
2019-20	18,254
2020-21	14,214
2021-22	15,706
Total	**64,994**

Source: Mission Director, NHM.

As seen from **Table 7.13**, during the period 2018-22, the number of TB cases identified in the State showed a mixed trend.

A new scheme NIKSHAY Poshan Yojana was launched by the GoI in 2018 for distribution of incentives for nutritional support to Tuberculosis (TB) patients. Benefits under the scheme are delivered through Direct Benefit Transfer to the bank account of the beneficiary. All TB patients notified on or after 1st April 2018 including all existing TB patients are eligible to receive support under the scheme. The objective of the scheme is to provide nutritional support to every TB patient at the rate of ₹ 500 per month for six months of their treatment.

Details of incentive paid in the State are shown in **Table 7.14**.

Table 7.14: Details of incentive paid in the State

Year	Total number of TB patients identified during the year	Number of patients to whom incentive was paid	Number of patients to whom incentive was not paid	Reasons for non-payment
2018-19	16,820	15,108	1,712	Due to non-availability of bank account number, submission of wrong bank account number
2019-20	18,254	17,008	1,246	
2020-21	14,214	13,538	676	
2021-22	15,706	15,125	581	
Total	**64,994**	**60,779**	**4,215**	

Source: Data supplied by the Department.

From **Table 7.14**, it can be seen that 4,215 (6.49 *per cent*) patients were not paid incentive under the scheme.

In the three selected districts, financial incentive for nutritional support was not paid to 1,176 beneficiaries as per the details given in **Table 7.15**.

Table 7.15: Details of incentive paid to beneficiaries

Year	Kinnaur			Kangra			Solan		
	Total number of TB patients	Patients paid incentive	Patients not paid incentive	Total number of TB patients	Patients paid incentive	Patients not paid incentive	Total number of TB patients	Patients paid incentive	Patients not paid incentive
2018-19	210	191	19	3,200	2,992	208	1,927	1,657	270
2019-20	228	207	21	3,332	3,084	248	2,023	1,930	93
2020-21	187	186	1	2,523	2,423	100	1,622	1,584	38
2021-22	192	192	0	2,649	2,563	86	1,909	1,817	92
Total	**817**	**776**	**41**	**11,704**	**11,062**	**642**	**7,481**	**6,988**	**493**

Source: Data supplied by the Department.

CMOs, in reply, stated that bank accounts of patients were not available; some patients died; some patients refused to take benefits. The replies were not acceptable as all the necessary formalities should have been completed at the time of treatment of the patients so that intended benefits could be provided to the patients.

In the Exit Conference (January 2023), the Secretary (Health) stated that the State is trying to do wide follow-up in order to reduce the level of non-payment of benefits to TB patients.

7.3.4 Health Systems Strengthening (HSS)

Components of Health Systems Strengthening (HSS) include adoption of Indian Public Health Standards, defined quality standards, skill gaps and standard treatment protocols, hospital management society (Rogi Kalyan Samiti) and quality improvement programme. HSS aims to strengthen public health facilities by the above components.

7.3.4.1 Creation of Health and Wellness Centres under Ayushman Bharat Pradhan Mantri Jan Arogya Yojna (PMJAY)

National Health Policy, 2017 envisaged comprehensive primary healthcare through establishment of "Health and Wellness Centres". In the budget 2018-19, the Government of India announced creation of 1.50 lakh Health and Wellness Centres (HWCs). The objective of HWC is to deliver comprehensive primary healthcare that is universal and free to the user

with a focus on wellness and delivery of an expanded range of services closer to the community.

In Himachal Pradesh, against GoI approval of 1,752 number of HWCs (PHCs and HSCs), 1,752 HWCs (431 PHCs, 1,321 HSCs) were designated as HWCs in the State during 2018-21. As of March 2023, 1468 (530 PHCs, 938 HSCs) HWCs were operationalised against 2,136 (563 PHCs, 1,573 HSCs) notified HWCs. The following observations are made on the status of HWCs in the State:

(i) Community Health Officers (CHOs) were to be posted in HWCs (only in HWCs converted from HSCs[2]). It was noticed that only 758 (57 *per cent*) CHOs were posted in 1,321 HWCs. In the absence of CHOs, activities under the scheme could not be started in the remaining 563 HWCs which resulted in delay in achieving the targets for delivery of services to the community.

(ii) As per the Framework for Implementation of Record of Proceedings (2020-21) of GoI, CHOs were not to be recruited on outsourced basis. However, it was seen that these CHOs were outsourced through a company[3]. GoI directed the State Government during August 2020 that all 758 CHOs already recruited through M/s HLL Lifecare Ltd on outsourced basis should be shifted under National Health Mission contract. Appropriate action in this regard was yet to be taken as of date of audit.

(iii) Under NHM, extra expenditure of ₹ 7.98 crore (April 2020- April 2022) was incurred on account of GST and administrative charges for hiring CHOs on outsourced basis and not on contract under NHM.

As per MoU, the CHOs before joining the bridge course[4] had to sign a contract accepting all the terms and conditions and a bank guarantee valuing ₹ one lakh shall be provided to HLL Lifecare Ltd valid for one year. Selected candidates will have to serve the HWC for three years. In case the candidate resigns without serving three years (without three months' prior notice), the bank guarantee submitted would be forfeited.

It was noticed that 62 CHOs resigned before completion of three years' service and bank guarantee obtained for ₹ 62 lakh was to be forfeited by HLL Lifecare Ltd. The forfeited amount of bank guarantee was not refunded to NHM, which had to bear the cost of the bridge course provided to CHOs.

The Department confirmed the facts and figures (January 2023) and further stated that the matter regarding refund of the forfeited amount will be taken up with the company.

In the Exit Conference (January 2023), the Secretary (Health) stated that the process for recruitment of CHOs has been initiated and posting would be done in due course.

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2 Medical Officer (MBBS) is in charge of the PHC; CHO (B.Sc. Nursing) is in charge of the HWC.
3 HLL Lifecare Limited Thiruvananthapuram (Kerala).
4 Course for prospective CHOs to enable comprehensive primary healthcare service delivery

7.3.4.2 Utilisation of the funds under HWCs in State

The position of funds allotted by the Government under Health & Wellness Centres (HWCs) and their utilisation during 2018-22 is shown in **Table 7.16**.

Table 7.16: Showing funds allotted under HWCs

(₹ in crore)

Year	Funds allotted by GoI	Expenditure incurred	Shortfall	Shortfall (*per cent*)
2018-19	14.72	3.22	11.50	78.13
2019-20	62.05	24.56	37.49	60.42
2020-21	128.73	31.47	97.26	75.55
2021-22	59.50	62.23	-	No shortfall
Total	**265.00**	**121.48**		

Source: Data supplied by the Department.

From **Table 7.16**, it can be seen that there was shortfall in utilisation of funds ranging between 60 and 78 *per cent* during the three-year period (2018-21) while no shortfall wags noticed during 2021-22.

Audit noticed that:

- ₹ 82.89 crore[5] out of ₹ 265.00 crore was allotted by GoI for infrastructure strengthening of sub-centres to HWCs during 2018-22, out of which only ₹ 18.35 crore was utilised durin 2020-22.
- Under IEC activities, against the allotment of ₹ 2.86 crore (2018-22), expenditure of ₹ 1.36 crore only was incurred during 2020-22 which shows that adequate IEC activities were not carried out.

7.3.4.3 Utilisation of funds under HWCs in the selected districts

For creation of infrastructure in the newly opened HWCs, funds were released by the Director, NHM to the CMOs/ District Health Societies during 2018-22 but the CMOs/District Health Societies failed to utilise the allotted funds. The details of allocation and utilisation are given in **Table 7.17**.

Table 7.17: Details of allocation and utilisation

(₹ in lakh)

Year	Kinnaur			Kangra			Solan		
	Amount released	Amount utilised	Unspent balance	Amount released	Amount utilised	Unspent balance	Amount released	Amount utilised	Unspent balance
2018-19	--	--	--	--	--	--	--	--	--
2019-20	12.54	0.50	12.04	39.84	13.37	26.47	20.90	1.50	19.40
2020-21	31.17	1.45	29.72	279.78	117.43	162.35	85.18	11.41	73.77
2021-22	11.93	4.52	7.41	448.01	132.54	315.47	140.26	33.15	107.11
Total	**55.64**	**6.47**	**49.17**	**767.63**	**263.34**	**504.29**	**246.34**	**46.06**	**200.28**

Source: Data supplied by the Department.

Thus, against the allotment of ₹ 10.70 crore during 2019-22, CMOs/District Health Societies could only utilise a meagre amount of ₹ 3.16 crore and the remaining amount of ₹ 7.54 crore was lying unutilised with the districts.

[5] 2018-19: ₹ 7.46 crore, 2019-20: ₹ 17.50 crore, 2020-21: ₹ 56 crore, 2021-22: ₹ 1.93 crore.

In the selected HSCs which were upgraded as HWCs, required facilities were not provided as given in **Table 7.18**.

Table 7.18: Details of facilities provided in HWCs (earlier HSCs) in the selected districts

Description of the facility required	Kinnaur (35 HWCs)	Solan (103 HWCs)	Kangra (449 HWCs)
	Number of HWCs in which facility was provided		
CHOs posted	2	66	163
External branding undertaken	2	103	220
Repair and renovation undertaken	0	3	26
Tablet/ PC provided for IT application	3	83	227
Internet connectivity	3	61	357

It can be seen from **Table 7.18** that meagre facilities were created.

- In the selected districts, out of 587 HWCs, CHOs were posted only in 231 HWCs, external branding was not carried out in 262 HWCs, repair and renovation was not undertaken in 558 HWCs, tablet/PC was not provided in 274 HWCs and internet connectivity was not provided in 166 HWCs of Kinnaur, Solan and Kangra districts.

Merely designating HSCs and PHCs as HWCs without creation/provision of services will not serve the intended purpose of delivery of comprehensive primary healthcare.

7.3.4.4 Treatment of final expenditure without obtaining Utilisation Certificates

Operational guidelines (Para 5.5.2) of National Rural Health Mission for financial management provides that the funds released against the works are to be considered as "Deposit under Capital Work in progress and funds released to the DHS/Sub-District Hospitals/CHC/PHC/Medical Officer etc. shall not be treated as expenditure unless they are reported as expenditure (either SOE/UC, whichever is applicable) by these institutions/bodies."

The year-wise details of funds released for civil works is shown in **Table 7.19**.

Table 7.19: Year-wise details of funds released

(₹ in crore)

Year	Directorate of Health Services	DHs	CHs/CHCs	PHCs	Total
2016-17	11.87	0.91	4.42	5.96	23.16
2017-18	0.00	0.97	4.03	3.13	8.13
2018-19	43.20	0.88	2.76	2.25	49.09
2019-20	0.00	0.55	2.75	2.90	6.20
2020-21	4.43	0.21	3.60	4.04	12.28
2021-22	0	0.40	3.21	3.76	7.37
Total	**59.50**	**3.92**	**20.77**	**22.04**	**106.23**

- An amount of ₹ 106.23 crore was booked as final expenditure in the accounts by Mission Director, NHM without obtaining Utilisation Certificates (UCs). Out of total funds, ₹ 59.50 crore was released during 2016-22 to the Director, Health Services (DHS) for civil works under HSS for further transfer to PWD/contractor/executing agencies. Further, an amount of ₹ 46.73 crore (₹ 106.23 crore - ₹ 59.50 crore) was

released to District Health Societies on account of annual maintenance grant/untied funds/corpus granted to DHs/CHs/CHCs/PHCs.

- In the accounts, the funds released to the DHS and District Health Societies were treated as final expenditure whereas it should be shown as deposit/advance till completion/submission of UCs from the concerned executing agencies.

Thus, the above funds which were released to DHS and District Health Societies for civil works/grants were booked as expenditure instead of showing them as advance in the accounts of NHM till their actual utilisation, due to which neither the status of execution of the works could be ascertained nor were UCs received.

In CMO Kangra, it was noticed that UCs for ₹ 0.22 crore were not obtained from 1,413 Village Health Sanitation and Nutrition Committees (VHSNCs) for the advances released under NHM during 2016-21. In four[6] out of eight selected BMOs, it was noticed that UCs for an amount of ₹ 28.17 lakh were pending as of April 2022. In reply, BMOs stated that necessary action would be taken for obtaining the UCs.

7.3.4.5 Diversion of funds from NHM to State Scheme

Under HSS, an amount of ₹ 1.02 crore was transferred to Chief Executive Officer, Himachal Pradesh Swasthya Bima Yojana in April 2021 by Mission Director, NHM Shimla on account of reimbursement to dialysis beneficiaries covered under Mukhya Mantri Himachal Health Care Scheme (HIMCARE). The HIMCARE scheme is a State scheme and diversion of NHM funds to State health scheme without the approval of GoI was irregular.

7.3.4.6 Non-utilisation of Funds

The details of the cases where Mission Director, NHM Shimla released funds which were unutilised are shown in **Table 7.20**.

Table 7.20: Details of cases where funds were unutilised

(₹ in crore)

Sl. No.	Allocated funds	Purpose	Date of release of fund	Agency to whom funds were released	Amount lying unutilised	Remarks
1.	1.05	Civil Works (7 HSCs, 1 PHC)	August 2016 to April 2019	CMO, Kangra (released to Executive Engineer, HPPWD)	0.26	CMO Kangra replied that the amount of ₹ 0.26 crore (May 2023) was lying unutilised in the office and the proposal for diversion has been sent to the competent authorities for obtaining necessary approval.
	1.78	Construction of 15 HSCs, 2 PHCs	July 2021		1.78	Amount was lying unutilised due to non-start of works. In reply, CMO Kangra (May 2023) stated that the funds had been released to the concerned executive agencies and were lying unutilised with the executive agency.
2.	5.00	Campus computerisa-tion	March 2015	Principal, RPGMC Kangra	1.32	₹ 5.00 crore was received in March 2015 out of which ₹ 3.68 crore was utilised whereas the remaining ₹ 1.32 crore was

[6] BMO Thural ₹ 9.37 lakh, VHSNCs-91; BMO Jawalamukhi: ₹ 4.71 lakh, VHSNCs-178; BMO Shahpur: ₹ 2.73 lakh, VHSNCs-153 and BMO Mahakal: ₹ 11.36 lakh, VHSNCs-110

Sl. No.	Allocated funds	Purpose	Date of release of fund	Agency to whom funds were released	Amount lying unutilised	Remarks
						lying unutilised. Neither any action had been taken for utilisation of the amount, nor was any action taken for return of the unspent amount even after lapse of seven years from the date of receipt of fund. (January 2023)
3.	3.77	Construction of School of Nursing	March 2022	Principal, RPGMC Kangra	3.77	The funds were lying unutilised in the saving bank account as of June 2022 as the funds were sanctioned in March 2022 for machinery and equipment.
4.	0.50	Establish-ment of bone clinic	October 2013	Principal, RPGMC Kangra	0.50	The full amount was refunded during October 2022. Thus, the department failed to utilise funds of ₹50.00 lakh after keeping them in saving bank account for nine years, depriving the patients of the intended facility.
5.	0.25	Kayakalp award money	August 2020	DH Kangra	0.09	As per reply of DH Kangra (May 2023) ₹ 0.09 crore was lying unutilised even after more than 32 months.
6.	19.37	Construction of TCCC (Tertiary care cancer centre)	2015-16	IGMC Shimla	7.52	Out of ₹ 19.37 crore released by NHM, ₹ 11.85 crore was released to HPPWD (March 2019 onwards) and the balance amount of ₹ 7.52 crore plus interest accrued was transferred to DMER (nodal officer) during September 2021 which remained unutilised. 85 *per cent* construction work of TCCC was completed so far (September 2022). However, the TCCC could not be made functional even after lapse of 7 years from the date of sanction of funds.
Total					**15.24**	

A total amount of ₹15.24 crore, as detailed in **Table 7.20**, remained unutilised due to reasons like non-availability of land and delayed execution of work which deprived the users of the intended benefits.

7.3.4.7 Telemedicine Service

Under the NHM, telemedicine facility was started through M/s Apollo Hospitals, Chennai in tribal areas of Lahaul & Spiti and Chamba districts at DH Keylong and CHC Kaza during 2015-16, CH Killar in October 2018 and CH Bharmour in October 2019.

Telemedicine services were also started at 25 rural locations in Shimla, Sirmour and Chamba districts during 2015-16. Specialist hub for providing teleconsultation through specialist doctors in gynaecology, general medicine and paediatrics was started in Solan district during 2015-16. Facilities were mapped with specialist hub at IGMC Shimla, RPGMC Kangra and LBSGMC Ner Chowk. One General Nursing and Midwifery (GNM) staff was posted in each telemedicine centre for facilitating teleconsultation of patients with specialist doctors. Telemedicine services were also started in 50 remote HSCs from April 2019 onwards. The operation and management of these 75 telemedicine centres were done through M/s Piramal

Swasthya Management and Research Institute, Hyderabad. Details of the patients consulted by both the firms and expenditure incurred are given in **Table 7.21**.

Table 7.21: Details of patients consulted through Telemedicine Services

Year	Expenditure incurred (₹ in lakh)	Number of patients consulted through Apollo Hospital in 4 telemedicine centers				Number of patients consulted through Piramal Swasthya in 75 telemedicine centers[7]
		CHC Kaza	DH Keylong	CH Killar	CH Bharmour	
2016-17	207.59	1,958	1,919	Started during 2018-19		10,712
2017-18	222.30	1,988	1,830			10,500
2018-19	318.78	1,818	1,551	473	0	16,755
2019-20	478.28	1,691	1,400	1,525	444	35,491
2020-21	415.29	758	632	458	515	43,520
2021-22	421.14	1,046	621	565	591	71,026
Total	**2,063.38**	**9,259**	**7,953**	**3,021**	**1,550**	**1,88,004**

Source: Mission Director, NHM.

From **Table 7.21,** it can be seen that:

- There was a downward trend in telemedicine consultation by the patients through Apollo hospital in DH Keylong, increasing trend in CH Bharmour and mixed trend in CHC Kaza and CH Killar during 2016-22.
- Number of consultation of patients through Piramal Swasthya in 75 telemedicine centers showed upward trend.

7.3.4.8 Execution of Level III Trauma Centres

For construction of level III Trauma Centres, an amount of ₹ 8.29 crore was released by the Government of India in December 2019 through NHM for setting up three trauma centre facilities including equipment and communication at CHC Nalagarh in Solan, CHC Kotkhai in Shimla and DH Una. In addition to the above, ₹ 4.50 crore was also sanctioned and released by the State Government for civil works, ₹ 4.21 crore for CHC Kotkhai and ₹ 0.29 crore for CHC Nalagarh, in January 2022 and February 2021 respectively. The details of funds released to the executing agency is given in **Table 7.22**.

Table 7.22: Details of funds released to the executing agency

(₹ in lakh)

Year	Name of the Level III trauma centre	Funds released/available		Total
		Civil works	Equipment and communication	
December 2019	Trauma centre CHC Nalagarh	61.95	242.40	304.35
December 2019	Trauma centre CHC Kotkhai	454.41	242.40	696.81
December 2019	Trauma centre DH Una	33.34	242.40	275.74
Total		**549.70**	**727.20**	**1,276.90**

Source: Mission Director, NHM.

Audit noticed that:

- 95 *per cent* of the construction work of Trauma Centre at CHC Nalagarh was completed (June 2022).
- Construction work of CHC Kotkhai was not started as of July 2022.

[7] Chamba-20, Kangra - five, Kinnaur-two, Kullu- five, Mandi-20, Shimla-10 and Sirmour-13

- The approval of the State Government for construction of Trauma Centre at DH Una was awaited as of July 2022 and funds of ₹ 2.76 crore were lying unutilised with DHS.
- The DHS took about 13 to 24 months to release the amount of ₹ 5.51 crore to CHC Kotkhai and CHC Nalagarh from the date of receipt of funds from Mission Director, NHM and the balance amount of ₹ 2.76 crore (DH Una) was lying unutilised with DHS (July 2022) even after 30 months from the date of receipt of funds from NHM.
- Process for purchase of equipment required for Trauma Centres was not initiated and funds of ₹ 4.80 crore for the purpose was lying unutilised with the concerned CHCs.

Due to delay in taking action, Trauma Centres were still lying incomplete, and the purpose of their establishment was not accomplished.

7.3.4.9 Construction of Mother and Child Hospitals

GoI approved the construction of ten Mother and Child Hospitals (MCHs) estimated at ₹ 175.25 crore between 2013-14 and 2017-18 as detailed in **Table 7.23**.

Table 7.23: Status of Mother and Child Hospitals in the State

(₹ in crore)

Sl. No.	Name of the health institution	Year of sanction	Number of beds	Approved cost	Funds received from GoI	Funds transferred till June 2022 to the district	Civil work completed (*per cent*)
1	DH Mandi	2013-14	100	20.00	20.00	20.00	99
2	DH Kullu	2017-18	100	20.00	20.00	13.61	99
3	RPGMC Kangra	2016-17	200	40.00	28.95	23.95	65
4	CH Nurpur	2016-17	50	10.00	10.00	10.00	60
5	DH Bilaspur	2017-18	50	10.00	6.50	6.50	70
6	DH Una	2016-17	100	20.00	13.57	13.57	60
7	YSPGMC Nahan*	2016-17	50	10.00	5.00	5.00	Not started
8	DH Solan	2016-17	50	10.00	2.00	2.00	Not started (land unavailability)
9	KNH Shimla	2013-14	100	23.25	23.25	23.25	Completed
10	RH Sunder Nagar	2015-16	50	12.00	12.00	12.00	Completed
Total				**175.25**	**141.27**	**129.88**	

Source: Mission Director, NHM.

**Yashwant Singh Parmar Government Medical College.*

GoI released ₹ 141.27 crore to NHM for the construction of these MCHs. The Mission Director, NHM released ₹ 129.88 crore between 2013-14 and 2017-18 to the executing agencies. Out of 10 MCHs, construction of two MCHs had not started, six MCHs were in progress and two were completed.

It was also observed that:

- Construction of two MCHs at Nahan and Solan had not been started and funds of ₹ 7.00 crore were lying unutilised with the concerned health institutions for almost six years.
- Construction of three MCHs (RPGMC Kangra, CH Nurpur & DH Una) and one MCH (DH Bilaspur) was not completed even after six years and five years respectively from their respective years of sanction.

- Civil works of two MCHs at DH Mandi and DH Kullu were stated to be completed during April and June 2022 respectively but the facilities were not utilised due to non-installation of equipment.

7.3.4.10 Mechanism for maintenance of Medical Equipment

Letter of intent was issued to M/s Next Gen Medical Devices during October 2017 for maintenance of medical equipment in health institutions in the State. The firm was to start the work in November 2017 as per the terms and conditions, but the agreement was signed in May 2019 i.e., after 20 months from the date of issue of letter of intent. The Standard Operating Protocol (SOP) for the implementation of project was finalised by Mission Director, NHM in July 2019. The service provider was to ensure that at no point in time should any equipment remain dysfunctional beyond 7 days of registering of the complaint at the user end. In case the equipment is dysfunctional beyond 7 days, penalty ranging between ₹ 300 to ₹ 3,000 for every extra day beyond seven days, depending upon the declared asset value, would be imposed.

Audit noticed that:

- As per portal of NHM developed by the firm, a total of 7,597 complaints (May 2019 to June 2022) were registered for repair of equipment by the health institutions. In 1,207 out of 7,597 complaints, there was delay ranging between eight to 292 days in resolving the complaints. No action was taken by the Mission Director, NHM to impose penalty as per the clause of the agreement. District-wise total number of complaints which were not attended/resolved within seven days are given in **Table 7.24**.

Table 7.24: District-wise details of complaints attended late

Sl. No.	Name of district	Number of complaints attended after delay	Period of delay (in days)
1	Bilaspur	76	8 to 233
2	Chamba	77	8 to 178
3	Hamirpur	107	8 to 280
4	Kangra	455	8 to 249
5	Kinnaur	23	8 to 60
6	Kullu	63	8 to 160
7	Lahaul and Spiti	8	8 to 86
8	Mandi	125	8 to 292
9	Shimla	101	8 to 181
10	Sirmour	59	8 to 245
11	Solan	59	8 to 187
12	Una	54	8 to 97
Total		**1,207**	

Source: Portal of NHM.

- Penalty of ₹ 2.80 crore (penalty calculated as per the data available in the portal) was not imposed on the firm for delay in repairing of equipment as prescribed in the agreement. The NHM has not initiated any action in this regard.

  The Department confirmed the facts and figures (January 2023) and further stated that matter regarding the penalty would be taken up with the firm.

- In district Kangra, the firm was not repairing the medical equipment properly as some of the equipment declared as non-repairable by the firm, was subsequently got repaired by the health institution (RPGMC, Kangra) from another firm. This shows that the firm had not discharged its responsibility as efficiently as it should have. Further, physical verification conducted by Audit revealed dissatisfaction with the services of the firm.

7.4 Other findings related to remaining schemes

7.4.1 Non-utilisation of funds

Details of non-utilisation of funds are shown in **Table 7.25**.

Table 7.25: Non-utilisation of funds of GoI schemes

(₹ in crore)

Sl. No.	Funds received from	Amount	Purpose	Month of release of fund	Funds released to	Amount lying unutilised	Remarks
1	GoI	0.99	For strengthening and upgradation of State Government Medical colleges for increase in PG seats	September 2018	Principal IGMC	0.99	The amount was drawn by the Principal, IGMC Shimla and retained by the college upto March 2021 and thereafter transferred to the DMER, Shimla. Thus, the amount was lying unutilised as of May 2023.
2	GoI	6.17	Setting up of College of Paramedical Education	March/ May 2019	SLBS GMC, Mandi	6.17	The whole amount was drawn in March 2021 and was lying unutilised as of May 2023 due to non-identification of suitable land near the college campus, want of essentiality certificate for running of the college and non-creation of additional posts.
3	GoI	0.55	National Mental Health Programme	August 2017	IGMC Shimla	0.47	After 19 months of sanction by GoI, the fund was drawn during March 2019, out of which only ₹ 8.00 lakh was utilised during 2019-20. The balance was lying unutilised. (June 2022)
4	GoI	5.86	Establishment of Regional Geriatric centre	November 2016, February 2017 and November 2017	Principal RPGMC, Kangra	3.00	GoI had released ₹ 5.86 crore but the Principal RPGMC, Kangra had drawn only ₹ 3.00 crore during March 2021 and the amount was transferred to DMER, Shimla. The amount was lying unutilised as of May 2023. The work regarding establishment of Regional Geriatric Centre could not be started due to court case.

7.4.2 Strengthening of State Drugs Regulatory System

A Centrally Sponsored Scheme, namely Strengthening of State Drugs Regulatory System was started by GoI in the year 2015. The scheme comprises upgradation of existing State drug testing labs, setting up of new drug testing labs and addition of manpower etc.; scheme to be completed by the end of March 2021. An MoU was signed (February 2015) between the State Government and GoI for strengthening of State Drug Regulatory Structure through construction of one drug testing lab at Baddi in the State. GoI released GIA of ₹ 40.50 crore[8] between April 2017 and November 2021. Further, the State allocated an amount of ₹ 5.11 crore.

Audit observed the following:

- Out of total released amount of GoI share of ₹ 40.50 crore, ₹ 20.94 crore was drawn from the treasury after six to eight months from the date of release of the amount by GoI. The remaining amount of ₹ 19.56 crore released by GoI during February 2021 (₹ 1.56 crore) and November 2021 (₹ 12.44 crore, ₹ 4.53 crore and ₹ 1.03 crore) was not drawn from the treasury as of August 2022.
- Out of total State share of ₹ 5.11 crore, ₹ 3.15 crore was drawn from the treasury after six to eight months from the date of release of the amount and ₹ 1.96 crore was not drawn from the treasury as of August 2022.

Scrutiny of records further revealed that a building was purchased during 2016-17 for ₹ 7.50 crore from Himachal Pradesh Housing and Urban Development Authority (HIMUDA) for setting up of the new drug testing laboratory. For installation of machinery and equipment required for this laboratory, the lease deed was executed with a firm[9] in March 2019. As of January 2023, expenditure of ₹ 19.17 crore was incurred on the project for civil work and equipment and the amount of ₹ 4.09 crore was lying unutilised in the savings account. Thus, despite provision of funds by GoI, the laboratory was not completed till date.

The Department confirmed the facts (January 2023) and further stated that matter was being regularly pursued with the firm for the completion of the laboratory.

The Government in its reply (January 2024) stated that civil work in respect of State drug testing laboratory is complete and the procurement process of 95 *per cent* of the equipment has been completed and the laboratory can be made operational now. The Department has also finalised the agency for operation and maintenance of the laboratory and the laboratory will be made functional soon.

7.5 Conclusion

Management of funds released under the NHM to the State Government was not satisfactory, with amounts persistently remaining unspent at the end of each year. In the State, SDG target of 90 *per cent* institutional deliveries by 2022 was achieved. Deficiencies were noticed in the implementation of JSY and NIKSHAY Poshan Yojna as all the beneficiaries were not

[8] April 2017: ₹ 15.00 crore, February 2021: ₹ 0.81 crore, ₹ 5.13 crore, ₹ 1.56 crore and November 2021: ₹ 12.44 crore, ₹ 4.53 crore and ₹ 1.03 crore

[9] HLL Infra Tech Services Limited

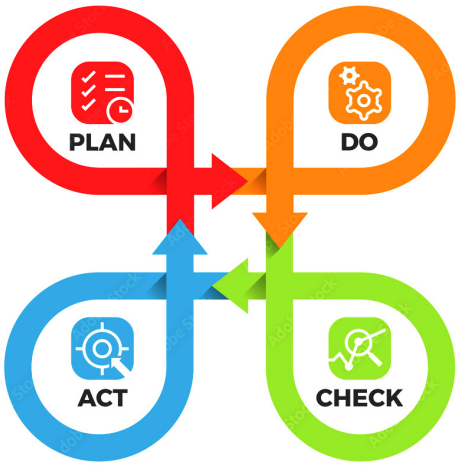
provided the benefits as envisaged under the scheme. Shortfall in target was also noticed in the immunisation programme. Health and Wellness Centres grappled with problems of shortage of manpower, inability to spend funds and lack of necessary infrastructure. Construction of trauma centres, mother and child hospitals, drug testing lab at Baddi and several other civil works were delayed and were yet to be completed which deprived intended beneficiaries of the benefits. Services of maintenance of medical equipment by the outsourced firms was unsatisfactory both in terms of timeliness and efficiency.

7.6 Recommendations

State Government may take steps to:

- *Strive to ensure that funds under NHM are optimally utilised to cover maximum beneficiaries.*
- *Develop a system to ensure maximum institutional deliveries and timely payment/coverage of all JSY beneficiaries for cash incentive.*
- *Develop a system for creation of infrastructure in HWCs created under Ayushman Bharat, appointment of CHOs and providing facilities as per the guidelines to ensure upgradation and operation of healthcare centres.*
- *Develop a system for monitoring of civil works under Health Strengthening System for timely completion of works.*

CHAPTER-VIII
REGULATORY MECHANISM



Chapter VIII: Regulatory Mechanism

To provide a sufficient level of quality healthcare in public/private health institutions throughout the country, various acts/regulations have been laid down. These acts/ regulations are made to standardise and supervise healthcare, ensure that health institutions comply with public health policies and provide safe healthcare to all patients.

8.1 State Medical Council

In terms of Para 30 (1) of the National Medical Commission (NMC) Act 2019, the State Government is to establish a State Medical Council (SMC) if no such council exists in that State. In Himachal Pradesh, the Medical Council was constituted under Himachal Pradesh Medical Council Act, 2003 and came into force in 2004.

The State Medical Council is required to:

- Maintain the live register and provide for the registration of medical practitioners.
- Prescribe a code of ethics for regulating the professional conduct of practitioners.
- Reprimand a practitioner, or suspend or remove his name from the register, or take such other disciplinary action.
- Receive complaints from the public (including patients or their relatives) against misconduct or negligence by a medical practitioner.
- Ensure that no unqualified person practices modern scientific systems of medicine.
- Provide protection to its members in discharging professional duties.

As per Section 3(3) of the Himachal Pradesh Medical Council Act 2003, the State Medical Council shall consist of (a) four members having requisite qualification as prescribed in the Indian Medical Council Act, 1956 (102 of 1956), to be nominated by the Government; (b) one member from each Government Medical College, elected by members of the medical faculty of that college from amongst its permanent members of teaching faculty; (c) nine members to be elected by registered practitioners from amongst themselves including one member elected by the Himachal Pradesh Medical Officers Association (d) Director of Medical Education (e) Principals of the Government Medical Colleges of the State and (f) Director of Health Services. Further, as per Section 3 (9), the Government shall, by notification in the official gazette, publish the names of the members. Presently, the Council is working with the strength of President and ex-officio members and there are no elected/nominated members (March 2023).

Audit noticed from the records of the SMC that:

- Section 31(6) of the National Medical Commission (NMC) Act, 2019 prescribes that every State Medical Council shall maintain and regularly update the State register in the specified electronic format and supply a physical copy of the same to the Ethics and Medical Registration Board within three months of the commencement of this Act.

Audit noted that SMC had not published the list of all registered practitioners in the public domain on yearly basis; however, it was stated that it had maintained a list of registered medical practitioners manually and quarterly reports were sent to NMC.

- Rule 15(7) of Himachal Pradesh Medical Council Act, 2003 says that no person though qualified in modern scientific system of medicine, shall practice in the State of Himachal Pradesh without having a certificate of registration. Any person serving or practising modern scientific system of medicine in Himachal Pradesh shall be registered with the Council under this Act.

  In this regard, it was noted that:

  - Not all the employed doctors in Himachal Pradesh were registered with the SMC and no mechanism was adopted by the SMC to track the non-registered employed/non-employed doctors.
  - No procedure was developed by the SMC to de-register/cancel the names of doctors who had expired or migrated to other states or stopped practicing in the State.
  - SMC had published a public notice on 03/07/2015 in leading newspapers for re-registration of doctors requiring renewal of their registration. Audit observed that as of September 2022, 2779 doctors had not renewed their registration. No action was taken by the SMC against those doctors who were practicing without renewals/registration.

8.2 Regulation through Clinical Establishments Act (CEA), 2010

Clinical Establishments Act aims to register and regulate clinical establishments based on minimum standards to improve quality of public healthcare in the country. The Act is applicable to all types (both therapeutic and diagnostic types) of clinical establishments from the public and private sectors, belonging to all recognised systems of medicine, including single doctor clinics.

In exercise of the powers conferred by Section 54 of the Clinical Establishments (Registration and Regulation) Act 2010, the Government of Himachal Pradesh had framed the Himachal Pradesh Clinical Establishments (Registration and Regulation) Rules, 2012.

As per Section 8 of CEA 2010, the State Council for Clinical Establishments was constituted in 2012 and reconstituted in 2018. The State Council shall perform the following functions:

- Compiling and updating the state register of clinical establishments.
- Sending quarterly returns for updating the national register (including in the digital format).
- Hearing of appeals against the orders of the authority, publication on annual basis of a report on the state of implementation of standards in the State.
- Monitoring the implementation of the provisions of the Act and rules in the State.

8.2.1 Non-functioning of State Council of Clinical Establishments

Section 8(1) of the Clinical Establishments (Registration & Regulation) Act, 2010 stipulates that the State Government shall constitute a State Council for clinical establishments. Subsequently, the State Council of Clinical Establishments was constituted in November 2012 and was reconstituted in December 2018 with Chairman[1] and 18 other ex-officio members (all heads of health directorates, one representative each to be nominated by the executive committee of the State medical/dental/nursing/pharmacy council and other members). Audit scrutiny revealed the following:

- The Council had not compiled and updated the State registers of clinical establishments as mandated in Para 4 (a) of the Himachal Pradesh Clinical Establishments (Registration and Regulation) Rules, 2012, due to which the position of the number of clinics and nature of clinics running in the State could not be ascertained.
- In terms of Para 7 of the Himachal Pradesh Clinical Establishments (Registration and Regulation) Rules, 2012, the State Council is to conduct meetings every six months. It was, however, noticed that since the constitution of the State Council, only one meeting was held on September 2017. Due to non-conducting of meetings on a regular basis, important regulatory issues relating to clinical establishments remained undiscussed.

  The Department in its reply stated that the State Council meeting could not be held due to frequent change of officers at senior level and due to Covid pandemic.
- In terms of Para 11 of the Himachal Pradesh Clinical Establishments (Registration and Regulation) Rules, 2012, the Council was to prepare the annual accounts and get it audited annually by a chartered accountant. The Council had not prepared annual accounts since its formation.

Thus, the State Council of Clinical Establishment at the apex level had not been functioning effectively, which could be a major reason for poor implementation of the CEA in the State as discussed in the succeeding paragraphs.

The Government (January 2024) admitted the facts and stated that the Government of India is developing a portal for maintenance of register for clinical establishments.

8.2.2 Non-initiating permanent registration

In April 2016, Government of India directed the State Government to start the process of permanent registration of all clinical establishments. Subsequently, all the District Registering Authorities (DRA) were directed during May 2016 by the Director, Health Safety & Regulation, Himachal Pradesh to start permanent registration. The Act provided that no enquiry is to be conducted prior to grant of provisional registration and provisional registration issued by the authorities is valid for a period of one year only.

Audit observed that though directed by GoI in 2016, there was no mechanism put in place for permanent registration of the clinical establishments. The process of permanent registration was yet to be initiated till date (January 2024).

[1] Chairman: Additional Chief Secretary/ Principal Secretary/ Secretary (Health).

Further, the Act and the Himachal Pradesh Clinical Establishments (Registration and Regulation) Rules, 2012, did not provide for specific number of regular inspections of establishments with provisional registration. Thus, due to lack of proper monitoring provisions, clinical establishments were operating without provisional registration or without renewal of provisional registration as discussed in succeeding paragraphs.

The Department, in reply, admitted the facts and stated that most of the clinical establishments were being inspected only on complaint basis.

This indicates serious flaws in implementation of the provisions since regular inspections are necessary for ensuring operation of the establishments as per the rules.

In the Exit Conference, Secretary (Health) admitted the facts and stated that detailed modalities have not been received from Government of India regarding permanent registration.

The Government in its reply (January 2024) stated that the registration and renewal process under the Act is being addressed through the Government of India portal where there is no provision of permanent registration till date. They are dependent on Government of India for permanent registration under the Act and they are in constant touch with them for the same.

8.2.3 Non-renewal of registration by clinical establishments

In terms of Section 17 of the CEA 2010, the validity of provisional registration shall be the last day of the twelfth month from the date of issue of the certificate of registration and such registration shall be renewable.

Details of clinics provisionally registered in the selected districts are given in **Table 8.1**.

Table 8.1: Details of provisionally registered clinical establishments

Year	Kinnaur	Solan	Kangra	Total
2016-17	5	99	530	634
2017-18	9	34	547	590
2018-19	11	18	591	620
2019-20	7	10	679	696
2020-21	10	25	708	743
2021-22	8	113	206	327
Total	**50**	**299**	**3,261**	**3,610**

Source: Departmental figures.

From **Table 8.1**, it can be seen that 3,610 clinics were provisionally registered in the three selected districts during the period 2016-22.

During joint physical verification of 23 private clinical establishments in the selected districts, it was noticed that 11 clinics/hospitals were running without renewal of their provisional registration and one clinic was not registered at all.

The health authority had not developed any mechanism to track and monitor the clinics running without registration, closed clinics, clinics running with unqualified staff etc., as no notices were issued by the DRAs in the selected districts to the clinics who were not renewing their registration.

8.2.4 Fixing of rates in private clinics without consultation with the Government

As per the operational guidelines for private clinical establishments, rates for procedures and services to be charged by the private clinics/hospitals were to be determined by the Central Government from time to time in consultation with the State Government. However, in Himachal Pradesh, Audit observed during joint physical verification that as the State Government did not prescribe any rates to be charged by the private clinics/ hospitals, the rates were fixed by the owners themselves. Hence, there is every possibility of overcharging by private clinics, nursing homes, etc. entailing more financial burden on the patients.

The guidelines further prescribed that the private clinics should display the details of charges at a conspicuous place. During joint physical verification of 23 private clinics, it was noticed that charges of treatment were not displayed in 18 clinics.

8.3 Regulation through Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) (PCPNDT) Act, 2002

The Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) (PNDT) Act, 1994, amended and renamed as the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) (PCPNDT) Act, 2002 is an act to provide for the prohibition of sex selection, before or after conception, and for regulation of pre-natal diagnostic techniques for the purpose of detecting genetic abnormalities or metabolic disorders or chromosomal abnormalities or certain congenital malformations or sex linked disorders and for the prevention of their misuse for sex determination leading to female foeticide; and, for matters connected therewith or incidental thereto.

As per the Annual Administrative Report 2016-17 published by Directorate of Health Safety and Regulation, Himachal Pradesh, CMO and BMOs were authorised and required to conduct the inspection of ultrasound clinics at least once in three months.

The details of inspections of private clinics having ultrasound facility conducted by health authorities in the State are shown in **Table 8.2**.

Table 8.2: Details of inspection of ultrasound clinics in the State

Year	Total number of ultrasound clinics registered in the State	No. of inspections required to be conducted (4 X number of ultrasound clinics in a year)	Total number of inspections conducted during the year	Shortfall	*Per cent* shortfall
2016-17	357	1,428	843	585	40.97
2017-18	376	1,504	952	552	36.70
2018-19	401	1,604	1,121	483	30.11
2019-20	417	1,668	1,037	631	37.83
2020-21	439	1,756	591	1,165	66.34
2021-22	353	1,412	716	696	49.29

Source: Director Health Safety & Regulation.

From **Table 8.2**, it can be seen that there was shortfall ranging from 30.11 *per cent* to 66.34 *per cent* in conducting inspections of the ultrasound clinics during 2016-22.

The authorities of the Directorate of Health Safety & Regulation stated that due to shortage of staff and Covid pandemic, the targeted inspections could not be conducted.

Status of inspections conducted by health authorities in the private clinics having ultrasound facility in the test-checked districts is shown in **Table 8.3**.

Table 8.3: Details of inspections of clinics having ultrasound facilities in the selected districts

Year	Total number of ultrasound clinics registered in the test-checked district			Number of inspections required to be conducted (4 X number of ultrasound clinics in a year)			Total number of inspections conducted during the year			Shortfall (*Per cent*)		
	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra
2016-17	0	26	58	NA	104	232	NA	104	145	NA	No shortfall	87 (37.50)
2017-18	1	27	65	4	108	260	0	123	207	4 (100)	--do--	53 (20.38)
2018-19	0	30	68	NA	120	272	NA	139	163	NA	--do--	109 (40.07)
2019-20	1	31	73	4	124	292	0	104	198	4 (100)	20 (16.13)	94 (32.19)
2020-21	0	31	79	NA	124	316	NA	95	63	NA	29 (23.39)	253 (80.06)
2021-22	0	33	80	NA	132	320	NA	92	62	NA	40 (30.30)	258 (80.63)

Source: Respective district CMOs. NA- Not applicable.

From **Table 8.3**, it can be seen that there was shortfall in conducting inspection of the ultrasound clinics every year, ranging from 16.13 *per cent* to as much as 100 *per cent* in the selected three districts during 2016-22 except during 2016-19 in Solan district, when inspections exceeded the prescribed targets.

Further, during joint physical verification of six private clinics having ultrasound facility in the selected districts, it was noticed that only four of these clinics were inspected by the health authorities, however, no inspection reports of the same were provided to Audit.

Thus, shortfall in inspection of ultrasound clinics could be a major contributing factor towards low child sex ratio in Himachal Pradesh in 2015-16 (919) to 2019-21 (929) as per the data of NFHS-4 and NFHS-5 respectively and demands attention.

The Government in its reply (January 2024) stated that there was a noticeable shortfall of inspections in the years 2020-21 and 2021-22 only because of Covid pandemic but now there is substantial improvement in the number of inspections in the year 2022-23.

8.4 Regulation through Drugs & Cosmetics Act, 1940

The Drugs and Cosmetics Act, 1940 regulates the import, manufacture and distribution of drugs in India. In exercise of the powers conferred by Sections 6(2), 12, 33 and 33N of the Drugs and Cosmetics Act, 1940 (XXIII of 1940), the Central Government made the Drugs and Cosmetics Rules, 1945.

In Himachal Pradesh, State Drug Controller, Baddi is assisted by Deputy Drug Controller, Assistant Drug Controllers and Drug Inspectors for implementation of the Act in the State. The authorities of this office have the power to grant, renew, suspend, cancel licences for manufacturing of drugs and cosmetics. The Drug Inspectors are required to collect drug samples from the drug manufacturers, suppliers/wholesalers/retailers and different drug stores of government health institutions and send them to the government analyst (Composite Testing Laboratory, Kandaghat) for testing the standard of the drugs. The Composite Testing Laboratory (CTL), Kandaghat is the only government analyst in the State.

8.4.1 Shortfall in conducting inspections as required under Drugs and Cosmetics Rules, 1945

As per provisions contained in Rule 51 of the Drugs and Cosmetics Rules, 1945 it shall be the duty of an inspector to inspect premises licensed for the sale of drugs, to inspect not less than once a year in all establishments licensed for the sale of drugs within the area assigned to him/her to satisfy himself/herself that the conditions of the licenses are being observed, to procure and send for test or analysis, if necessary, imported packages and to make record of all inspections etc. Further, Rule 52 prescribes similar provisions applicable on manufacturing.

Audit noticed that there was shortfall of 20 *per cent* to 35 *per cent* in inspections conducted in the State during 2016-22.

The details of inspections conducted in the State during 2016-22 are shown in **Table 8.4**.

Table 8.4: Shortfall in conducting of inspection in the State

Year	Total wholesalers, retailers, manufacturers in the State	Inspections conducted	Shortfall	Shortfall in percentage
2016-17	4,462	3,215	1,247	27.94
2017-18	4,731	3,776	955	20.18
2018-19	5,247	3,425	1,822	34.72
2019-20	6,019	4,596	1,423	23.64
2020-21	6,653	4,840	1,813	27.25
2021-22	7,550	5,941	1,609	21.31

Source: State Drug Controller, Baddi.

In the selected zones (Dharamshala and Baddi), Audit noticed that:

- In Baddi zone, there was shortfall in conducting inspections ranging between 46 *per cent* and 74 *per cent* during 2016-21.
- In Dharamshala zone, there was shortfall in conducting inspections ranging between 48 *per cent* and 72 *per cent* during 2016-21.

The State Drug Controller, in its reply (March 2022), stated that due to shortage of staff, multifarious duties, geographical conditions and non-availability of government vehicles, the targeted inspections could not be achieved.

The reply is not acceptable as shortfall in inspections by the Department can lead to unsupervised sale of spurious/ adulterated/ low quality drugs, which may cause health hazards, even resulting in fatalities.

The Government in its reply (January 2024) stated that all the Drug Inspectors have been directed to achieve the targets and to cover the backlog, if any. Further, they have also been directed to prepare the roster for the coming year so that the inspections can be planned for the year and to ensure that every sales & manufacturing establishment is inspected at least once in a year.

8.4.2 Sale of drugs by wholesalers/retailers without adhering to prescribed norms and parameters

The norms and parameters prescribed in the rules were not adhered to by the wholesalers/retailers as observed during the inspection of six randomly selected inspection reports of drug wholesalers/retailers conducted by Drug Inspectors as tabulated in **Table 8.5**.

Table 8.5: Probable impact of not following norms

Parameters	Number of selling premises	Probable impact
Running without pharmacist	2	Dispensing the wrong drugs or giving incorrect usage instructions can have serious consequences for patients
Drug license not displayed	3	Authenticity of the store could not be ascertained
Failure to produce sale bill book/ purchase invoices	6	Sale records of drugs could not be assessed
Running retail business on wholesaler license	2	Unauthorised sale of drugs

Source: Inspection reports of the Department.

Table 8.5 indicates that the drug retailers/wholesalers in Himachal Pradesh were not adhering to the Drugs & Cosmetics Act, 1940 and Rules, 1945 fully, which is a scenario necessitating even more frequent inspections. The Government needs to take effective steps to increase the inspection percentage of the sales premises.

The Government in its reply (January 2024) stated that the State Drug Regulator through its Drugs Inspectors is regularly inspecting the retailers/wholesalers to ensure that they comply with the conditions of license laid down under Rule 65 of Drugs & Cosmetics Rules. The fact, however, remains that the provisions of the Drugs & Cosmetics Act, 1940 and Rules, 1945 were not adhered to by the drug retailers/wholesalers which is evident from the deviations observed from the inspection reports of the Department.

8.4.3 Non-inspection of firms with deemed expired licenses

As per Rule 63 of the Drugs and Cosmetics Rules, 1945, an original license for selling and manufacturing of drugs shall be valid for a period of five years. The license shall be deemed to have expired if application for its renewal is not submitted within six months after its expiry.

Audit noticed that as of March 2022, there were 8,770 firms (retailers, wholesalers, retailers + wholesalers and restricted units) as per Xtended Licensing, Laboratory & Legal Node (XLN)[2] software. During test-check of records of Baddi zone, it was noticed that the names of 878 firms as on 20/02/2022 were shown in XLN software, out of which 221 firms had not renewed the licenses. Out of these 221 firms, licenses of 205 firms were in the category of deemed expired as per the rules *ibid* and licenses of the remaining 16 firms had expired and they were yet to submit application as on 20/02/2022. However, the names of these firms with deemed expired licenses were not removed from the list of license holders on the website. The Department had not carried out any inspection of these firms to ascertain the present status of their working and to ensure that unauthorised sale/manufacture of

[2] XLN software shows the list of license details, application status of retailer/wholesalers, registered pharmacist details, cancelled/suspended licenses details and retailer/wholesaler details.

drugs/cosmetics was not being carried out by these firms. Neither were notices issued to the respective firms for non-renewal of licenses. Thus, the probability of unauthorised sale/manufacture of drugs cannot be ruled out.

The Department, while confirming the facts, stated that the licensees had not applied for renewal even after expiry of the license validity period and the licenses were deemed to have expired.

The reply is not tenable as this does not absolve the responsibility of the Department from conducting inspections/issuing notices and removing these firms from the database of licensed firms.

The Government in its reply (January 2024) stated that directions have been issued to all the licensing authorities to shortlist the names of all the firms whose drugs license (sale/manufacturing) have been deemed cancelled/expired or not renewed after a period of six months of expiry. They had further directed the concerned Drugs Inspectors to inspect these firms within one month positively and take further necessary action, as per law, against these firms.

8.4.4 Shortfall in lifting of Drugs and Cosmetics samples

As per provision contained in Section 22(1)(b) of the Drugs and Cosmetics Act, 1940, the Drug Inspector shall take the samples of any drug and cosmetic which is being manufactured or being sold or is stocked or exhibited or offered for sale or is being distributed. As per instruction of the State Government issued in October 2019, 10 samples of drugs and cosmetics were required to be collected by each Drug Inspector every month. The number of samples collected against the samples required to be collected for the State is shown in **Table 8.6**.

Table 8.6: Samples collected against the samples required to be collected

Year	Number of Drug Inspectors in position	Samples required to be collected	Samples collected	Shortfall	Percentage of shortfall
2016-17	17	No such target fixed	2020	-	-
2017-18	20	-do-	1902	-	-
2018-19	26	-do-	1,622	-	-
2019-20	26	3,120	2,344	776	24.87
2020-21	26	3,120	2,839	281	9.01
2021-22	39	4,680	4,012	668	14.27
Total	**91***	**10,920**	**9,195***	**1,725**	**15.79**

Source: State Drug Controller, Baddi.
**Total has been calculated from 2019-20 onwards as no targets to lift the samples were instructed earlier.*

From **Table 8.6**, it is evident that the authorities of the State Drug Controller, Himachal Pradesh were not able to achieve the target fixed by the Government in lifting the samples as overall shortfall of 15.79 *per cent* had been observed during 2019-22. Shortfall in collection of drugs and cosmetics samples is an indicator of laxity in the regulatory process and has an associated risk of supply/sale of substandard/spurious/ wrong drugs to consumers.

The Government in its reply (January 2024) stated that Drug Inspectors in the State have been directed to achieve the targets for sample collection.

8.4.5 Delay in analysing samples

Section 23 of the Drugs and Cosmetics Act, 1940 provides that the Drug Inspector is required to submit the drug samples to the government analyst for analysis. Further, Section 25 says that the government analyst to whom a sample of any drug or cosmetic has been submitted for test or analysis under sub-section (4) of Section 23, shall deliver to the Inspector submitting it a signed report in triplicate in the prescribed form.

Audit scrutiny revealed that there was pendency in analysing the drug samples in CTL, Kandaghat to the extent of 55.10 *per cent* to 66.65 *per cent* during the period 2016-17 to 2021-22. The number of samples received and analysed are shown in **Table 8.7**.

Table 8.7: Drug samples received and analysed

Year	Opening balance of the drug samples	Samples received during the year	Total samples	Samples analysed during the year	Balance	*Per cent* of samples not analysed at the end of the year
2016-17	1,009	1,885	2,894	1,023	1,871	64.65
2017-18	1,871	1,832	3,703	1,235	2,468	66.65
2018-19	2,468	1,689	4,157	1,628	2,529	60.84
2019-20	2,529	1,899	4,428	1,829	2,599	58.69
2020-21	2,599	2,777	5,376	2,414	2,962	55.10
2021-22	2,962	3,426	6,388	2,303	4,085	63.95

Source: Composite Testing Laboratory, Kandaghat.

The Government in its reply (January 2024) stated that the new Drug Testing Laboratory will be made operational soon at Baddi and this will enhance the capacity of testing.

8.4.5.1 Non-analysing of samples within prescribed period and Not of Standard Quality (NSQ) Drugs

Rule 45 of Drugs and Cosmetics Rules, 1945 stipulates that government analyst shall furnish report of the analysis within a period of sixty days from the receipt of the sample.

Further, Section 18 of Drugs and Cosmetics Act, 1940 states that no person shall himself or by any other person on his behalf manufacture drugs for sale or for distribution or stock or exhibit or distribute any drugs, which is not of a standard quality or is misbranded, adulterated or spurious.

Status of time taken to analyse the samples by the government analyst of the State are detailed in **Table 8.8**.

Table 8.8: Time taken to analyse samples by the government analyst

Year	Number of samples received for analysis	Number of samples found not of standard quality	Time taken to analyse the samples			*Per cent* of samples whose analysis took more than prescribed time to total samples received
			Within 60 days	More than 60 days to 1 year	More than 1 year	
2016-17	1,885	35	1	267	1,617	99.95
2017-18	1,832	25	10	156	1,666	99.45
2018-19	1,689	27	1	118	1,570	99.94
2019-20	1,899	42	0	117	1,782	100
2020-21	2,777	59	7	249	2,521	99.75
2021-22	3,426	33	0	193	3,233	100

Source: Composite Testing Laboratory, Kandaghat.

From **Table 8.8**, it can be seen that there had been considerable delay in analysing the samples by the government analyst. During those periods, the drugs were already available in the market and consumers may have already consumed those "Not of Standard Quality" (NSQ) drugs.

The Government in its reply (January 2024) stated that the samples could not be analysed during the prescribed limit and there was considerable delay in the analysis of samples due to receipt of samples in excess of the capacity of the existing drug testing laboratory.

8.4.5.2 Delay in analysing the lifted drugs from Government Health Institutions

In the selected districts, in the health institutions having drug stores, Audit noticed that Drug Inspectors had not lifted the drug samples from five out of 13 Government hospital medical stores (CMO/DH/BMO).

Details of time taken to analyse the samples by the government analyst from the selected district stores are given in **Table 8.9**.

Table 8.9: Time taken to analyse the samples by the government analyst

Year	Number of samples lifted			Stock of medicines during the time of samples taken (in lakh)			Time taken to receive the test report (in months)			Stock of drugs at the time of receipt of report (in lakh)		
	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra	Kinnaur	Solan	Kangra
2016-17	0	4	27	NA	6.28	88.47	NA	10- 22	1-35	NA	0	0.01
2017-18	0	4	26	NA	1.72	108.31	NA	5- 26	3-39	NA	0	0
2018-19	0	4	0	NA	0.48	NA	NA	15-19	NA	NA	0	NA
2019-20	4	5	22	0.55	0.65	77.12	3-25	9-16	1-23	0	0	0.30
2020-21	6	5	18	5.82	1.08	34.48	10[@]	--[$]	14-17*	5.11	0	0
Total	**10**	**22**	**93**	**6.37**	**10.21**	**308.38**				**5.11**	**0**	**0.31**

Source: Information furnished by respective CMOs
NA- Not Applicable as no sample was lifted. $Report not received.
@Test reports of three samples yet to be received as of October 2021.
**Test reports of sixteen samples yet to be received as of November 2021.*

From **Table 8.9**, it can be seen that a total of 125 samples were lifted and at the time of lifting, 3.25 crore quantity of medicines were in the stores of the selected districts. The reports of 101 samples out of 125 samples were received after a period of one to 39 months and by that time, 3.19 crore quantity of medicines was already issued/dispensed. Thus, the purpose of conducting the tests of the samples of the drugs was largely defeated as by the time of receipt of the reports, almost all the medicines were already issued.

Further, it was noticed in one (Kangra) out of the three selected districts that the sample of two medicines (B Complex and Paracetamol Suspension) were declared substandard by Drug Inspector, Central Drugs Standard Control Organisation (CDSCO) and one medicine (Tab Telmisartan) was declared substandard by CTL Kandaghat during July 2018 and February 2020. However, 11.08 lakh quantities of these medicines were distributed by the Government health institutions as per the details given in **Table 8.10**.

Table 8.10: Details of medicines which were declared substandard in Kangra district

Sl. No.	Name of drug	Date of sample found substandard	Name of the procuring authority	Purchased quantity (in lakh)	Available stock at the time of receipt of report (in lakh)	Remarks
1	B Complex	July 2018	CMO, Kangra	8.00	1.97	6.03 lakh quantity already issued and balance still lying in stock.
2	Paracetamol Suspension	March 2019	--do--	0.25	0.01	0.24 lakh quantity already issued and balance replaced by the firm.
3	Tab Telmisartan 40 mg	February 2020	--do--	5.00	0.19 (available in stock of lower health institutions)	4.81 lakh quantity already issued and balance lying in stock.
Total				**13.25**	**2.17**	

Source: Departmental figures.

Poor quality of drugs is a threat to health because they can inadvertently lead to healthcare failures, such as antibiotic resistance and the spread of disease within a community, as well as death or additional illness in individuals. Concerted effort is required on the part of the Government, including the regulators, drug manufacturers and healthcare providers to ensure that testing of drugs is done without any delay so that only drugs of acceptable quality reach the patients.

8.4.5.3 Action taken by State Drug Controller on poor quality of drugs

The details of action taken by the State Drug Controller against the manufacture/sale of poor-quality drugs are shown in **Table 8.11**.

Table 8.11: Action taken by SDC against the manufacture/sale of poor quality of drugs

Financial year	Number of NSQ/spurious/adulterated samples related to drug manufacturer cases	Administrative action	Legal action	Sample challenged & further passed by Central Drug Laboratory, Kolkata
2016-17	25	20	5	-
2017-18	23*	13	8	1
2018-19	19	16	3	-
2019-20	27	22	4	1
2020-21	48**	37	6	1
2021-22	44	36	8	-
Total	**186**	**144**	**34**	**3**

Source: Information provided by SDC.

**In 2017-18, two samples of same batch were declared NSQ (Nahan and Paonta Sahib) and legal action taken by one inspector, **Four cases are under investigation.*

It can be seen from **Table 8.11** that administrative action was taken in 144 cases, legal action in 34 cases, three samples were challenged and further passed by Central Drug Laboratory, Kolkata and four remaining cases were under investigation.

Audit noticed that a total of 542 prosecution cases were pending in the courts as of March 2022. It was also noticed that during 2016-22, licenses of 106 manufacturers and

630 sale premises were cancelled due to contravention of Drugs & Cosmetics Act, 1940 & Rules, 1945 and by own request.

The Department should expedite action against the manufacturers/retailers for contravention of the Act, so that it acts as a deterrent for any further contraventions.

The Government in its reply (January 2024) stated that the State Drugs Controller Administration is taking action against the manufacture/sale of poor quality of drugs regularly as per the guidelines.

8.4.6 Non-completion of the work of Drug Testing Laboratory at Baddi

To ensure the quality, safety and efficacy of medicines, both for domestic use and for exports, the State regulatory system is required to be strengthened.

A Memorandum of Understanding (MoU) was signed in February 2015 between the State Government and the Ministry of Health & Family Welfare, Government of India, for strengthening the State drug regulatory system. Under this MoU, a drug testing laboratory was to be constructed at Baddi.

As discussed in **Para 7.4.2** of this report, Audit observed that the testing laboratory constructed at Baddi was not made functional till date (January 2023) despite availability of funds sanctioned by the Government. Presently, the drug tests were being done only by the CTL Kandaghat which was short staffed.

The Government had increased the sanctioned strength of Drug Inspectors from 22 (2017-18) to 44 (2018-19) in the State. Drug Inspectors were required to draw at least 10 samples a month. Thus, due to strengthening of staff strength of Drug Inspectors, more samples would be lifted. However, the testing capacity of the CTL had not been increased and the new laboratory at Baddi was yet to be made functional. As of March 2023, in CTL Kandaghat, there was overall shortage of 29.41 *per cent* of staff. Major shortage was noticed in the cadre of Public Analyst-cum-Chemical Examiner (100 *per cent*), Deputy Public Analyst (100 *per cent*), Sr. Scientist (60 *per cent*), Sr. Analyst (28.57 *per cent*) and Sr. Laboratory Technician (50 *per cent*). With the available manpower and infrastructure, the monthly capacity of drug testing in CTL, Kandaghat was on an average 20-25 samples per month against minimum lifting of 440 samples as per existing sanctioned strength of Drug Inspectors.

Thus, due to delay in establishment of the drug testing laboratory at Baddi coupled with inadequate manpower, the test reports of the samples were not analysed within the stipulated time and huge number of samples were remaining unanalysed at the end of every year. As a result, there is a high possibility of sale of poor-quality drugs during the intervening period leading to health hazards/deaths.

In the Exit Conference (January 2023), the Secretary (Health) stated that the work was not complete and necessary action was being taken.

The Government in its reply (January 2024) admitted the facts and stated that the construction work of the Drug Testing Laboratory at Baddi has been completed and 95 *per cent* of the equipment has been procured.

8.4.7 Non-testing of samples of Oxygen Indian Pharmacopoeia (IP) due to non-availability of testing facility

As per provision contained in Section 22(1)(b) of Drugs and Cosmetics Act, 1940, the Drug Inspector shall take the samples of any drug and cosmetic, which is being manufactured or being sold or is stocked or exhibited or offered for sale or is being distributed. Oxygen is considered as a drug in the form of Oxygen IP in terms of standards provided in Indian Pharmacopeia, 2018 and thus samples were to be lifted. For oxygen (IP), a licence is required under the Drugs and Cosmetics Rules, 1945. Rule 71 of the Drugs and Cosmetics Rules provides the condition for grant and renewal of license in Form 25, which includes medicinal gases.

During audit of the State Drug Controller, Audit noticed that license for manufacturing of oxygen IP by the licensing authority was issued/renewed to 14 oxygen (IP) manufacturers from 1996 to 2021 in the State. The samples of oxygen (IP) were required to be taken and sent to the Government laboratory for testing and analysis. However, the facility for testing of oxygen (IP) samples was not available in CTL Kandaghat and thus, the State lacked capacity for testing of oxygen (IP). Therefore, no samples of oxygen (IP) were lifted by the Drug Inspectors till the date of audit (February 2022) from all these 14 manufacturing units. In the absence of this, the quality standard of oxygen manufactured by these units could not be ensured.

The Department stated (March 2022) that the Drug Inspectors conduct inspection of manufacturing units to ensure that oxygen conforms to all standards and analysis will be done as soon as the new laboratory is functional. Further, Assistant Drug Controller, Dharamshala stated (August 2022) that there was no facility for quality testing of oxygen in the Government laboratory.

However, the fact remains that oxygen (IP) manufacturers were issued/renewed licences without lifting oxygen (IP) samples for quality testing.

The Government in its reply (January 2024) stated that all Drug Inspectors have already been directed to ensure that medicinal oxygen conforms to standards laid down under Drugs & Cosmetics Act.

8.4.8 Running of Blood Banks without renewal of licences

Rule 122F of the Drugs and Cosmetics Rules, 1945 provides for renewal of license before its expiry for the health institutions for running of blood banks. In Himachal Pradesh, 25 health institutions (public and private) were operating blood banks. Audit noticed that 12 (11 Government and one charitable trust) out of 25 health institutions had not renewed their licenses for operation of the blood bank till the date of audit (March 2022).

The Department, in its reply (March 2022), stated that licenses of these health institutions were not renewed due to pending process of renewal.

The reply was not acceptable as timely action was required to be taken before expiry of the license. In the absence of renewal of licenses of these blood banks, the quality of blood being

issued for patient use cannot be assured, and the risk of spread of diseases/deaths due to contamination of blood cannot be ruled out.

The Government, in its reply (January 2024), stated that directions have been issued to all the licensing authorities to expedite the matter of renewal of licenses of blood banks under their jurisdiction at the earliest.

8.4.9 Overcharging of drugs by manufacturers

National Pharmaceutical Pricing Authority (NPPA) was constituted vide Government of India resolution dated 29th August 1997 as an attached office of the Department of Pharmaceuticals (DoP), Ministry of Chemicals & Fertilisers as an independent regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices.

In terms of Para 14(1) of the Drug Price Control Order, 2013 (DPCO), the Government shall fix and notify the ceiling prices of scheduled formulations and no manufacturer shall sell the scheduled formulations at a price higher than the ceiling price. Further, Para 14(2) stipulates that if any manufacturer sells a scheduled formulation at a price higher than the ceiling price, such manufacturers shall be liable to deposit the overcharged amount along with interest thereon from the date of such overcharging.

Government of Himachal Pradesh vide notification dated May 2015 authorised all the CMOs, Assistant Drug Controllers and Drug Inspectors within their jurisdiction, in addition to their duties, to comply with the order and perform the functions as specified in the DPCO, 2013.

During the audit of the State Drug Controller, Audit noticed that the manufacturers were charging prices of medicines higher than the notified prices and NPPA had issued show cause notices to different firms during 2016-22 for overcharging. During random check of eight notices issued by NPPA to the firms, it was observed that the manufacturers had overcharged ₹ 112.87 crore from the consumers/patients as detailed in **Appendix 9**. In some other cases, only MRP and price fixed by NPPA was available, but quantities sold were not available, due to which the overcharged amount could not be ascertained as detailed in **Appendix 10**.

Audit noticed that details of recovery of the overcharged amount from the manufacturers were neither available on record nor did the State Drug Controller take follow-up action to recover the overcharged amount. Thus, due to lack of coordination between NPPA and the State Drug Controller, overcharging of drugs by the manufacturer was not acted upon.

The Government in its reply (January 2024) stated that fixation of prices of drugs and recovery of overcharged amount by the manufacturers is not under the purview/domain of the State Government. The reply was not acceptable as no action had been taken by the State Government in terms of notification dated May 2015.

8.4.10 Fixation of retail price by manufacturer of a new drug without price approval

In terms of Para 15(2) of DPCO, 2013, where an existing drug manufacturer launches a new drug with dosages and strengths as specified in the National List of Essential Medicines, such existing manufacturers shall apply for prior price approval of such new drug from the Government.

Audit noticed that several drug manufacturing firms in Himachal Pradesh had launched new drugs for which prior price approval from NPPA was not obtained. Random check of seven show cause notices issued by NPPA to firms revealed that during 2016-22, different firms were engaged in manufacturing/marketing of schedule formulations without prior price approval (**Appendix 11**). Audit further noticed that not a single case of overcharging was reported by SDC to NPPA.

8.5 Regulation through Atomic Energy Act, 1962

The Atomic Energy Regulatory Board (AERB) was constituted in 1983 under Atomic Energy Act, 1962 to carry out certain regulatory and safety functions under the Act. The mission of the AERB is to ensure that the use of ionizing radiation and nuclear energy in the country does not cause undue risk to the health of people and the environment.

Functions of the AERB *inter alia* include:

- Developing safety policies, safety codes, guides and standards for siting, design, construction, commissioning, operation and decommissioning of different types of nuclear and radiation facilities.
- Granting consents for siting, construction, commissioning, operation and decommissioning, after an appropriate safety review and assessment, for establishment of nuclear and radiation facilities.
- Ensuring compliance with the regulatory requirements prescribed by AERB through a system of review and assessment, regulatory inspection and enforcement.
- Prescribing the acceptance limits of radiation exposure to occupational workers and members of the public and acceptable limits of environmental releases of radioactive substances.

Any person duly authorised under Sub-section (4) of Section 17 of the Act may inspect any premises, or radiation installation, or conveyance as per Rule 30 of Atomic Energy (Radiation Protection) Rules, 2004.

8.5.1 Operation of x-ray machines without license

As per Rule 3 of the Atomic Energy (Radiation Protection) Rules, 2004, no person shall, without a license (a) establish a radiation installation for siting, design, construction, commissioning, and operation; and (b) decommission a radiation installation.

Audit observed that in 18 selected health institutions having x-ray facility, seven[3] were functioning without license from AERB.

During joint physical inspection, it was observed that five out of eight private clinical establishments having x-ray facility were operating without license from AERB.

The Government in its reply (January 2024) stated that due to non-availability of Radiological Safety Officer and Technical Assistant (Radiation Safety) staff as per AERB norms, the Department is unable to conduct inspections. However, Assistant Director

[3] CHC Syri, CH Chango, PHC Spillow, PHC Ribba, PHC Sultanpur, CH Jawalamukhi and CHC Sangla.

(Radiation Safety) is conducting the inspections in a routine manner and discrepancies found during the inspection are conveyed to the concerned.

8.5.2 Thermoluminescent dosimeters (TLD) badges for Radiation Protection

Thermoluminescent dosimeter badges are used to detect radiation at levels that can be harmful to humans. All the staff working in the x-ray room should wear TLD badges and/or pocket dosimeters[4] as per Atomic Energy (Radiation Protection) Rules, 2004 and AERB safety codes.

Audit observed that:

- TLD badges were provided to the technicians of the x-ray room only in six (IGMC, RPGMC, CH Shahpur, CH Kandaghat, CHC Sangla and CHC Dharampur) out of 18 selected health institutions having x-ray facility.
- Pocket dosimeters were provided to the technicians of the x-ray room only in two (IGMC and RPGMC) out of 18 selected health institutions having x-ray facility.

The Government in its reply (January 2024) stated that TLD badges are provided to the technicians of the x-ray room of all the Medical colleges and the health institutions. The reply was not acceptable as TLD badges were not found issued in selected health institutions as detailed above.

8.5.3 Directorate of Radiation Safety (DRS)

The Supreme Court had directed in the year 2001 for setting up of a Directorate of Radiation Safety (DRS) in each State for regulating medical x-rays. DRS was not formed in Himachal Pradesh, though an MoU for its formation was executed during February 2013 between AERB and Government of Himachal Pradesh. Functions which were to be done by DRS, are being carried out by Director, Health Safety and Regulation (DHSR) in the State.

AERB was mandated to carry out quality assurance performance test of x-ray units once in two years and to conduct periodic inspections by authorised personnel under Section 17 of the Atomic Energy Act, 1962. However, no inspections were conducted during 2016-17 to 2018-19. Further, during 2019-21, no targets were fixed for inspection of x-ray installations both in Government and private health institutions although 86 inspections were conducted.

The Government in its reply (January 2024) stated that there is no Radiation Safety Agency in Himachal Pradesh till date but the inspections under the provisions of Atomic Energy (Radiation Protection) Rules, 2004 are being conducted by the Assistant Director (Radiation Safety), Office of the DHSR, Shimla. No inspections were conducted before 2018-19 due to non-availability of staff trained as per AERB norms.

8.6 Regulation through Bio-Medical Waste Management Rules, 2016

The Himachal Pradesh State Pollution Control Board is a nodal agency in the administrative structure of the State Government for planning, promotion, coordination and overseeing the implementation of environmental programs.

4 TLD badges and pocket dosimeters are used for monitoring beta and gamma doses of radiation in workers.

In terms of Rule 10 of Bio Medical Waste Rules, 2016, one-time authorisation is to be obtained from State Pollution Control Board (SPCB) in Himachal Pradesh for generation, storage, treatment/disposal and handling of bio-medical wastes.

Audit noticed that 61 out of 85 CHs, 40 out of 94 CHCs and 98 out of 575 PHCs had not obtained SPCB authorisation for generation of bio-medical waste as of November 2021. Thus, 199 out of 754 health institutions had not obtained SPCB authorisation for generation of bio-medical waste. In the selected districts, 47 out of 204 health institutions (15 out of 25 CHs, 12 out of 30 CHCs and 20 out of 149 PHCs) had not obtained SPCB authorisation for generation of bio-medical waste as of November 2021.

The Government in its reply (January 2024) stated that the monitoring of authorisation under bio-medical waste of the health institutions is presently being done by the Director of Health Services.

8.7 Conclusion

The employed/practising doctors in Himachal Pradesh were not renewing their registration regularly with the State Medical Council. No mechanism was adopted by the State Medical Council to track and monitor the list of non-registered doctors. State Council of Clinical Establishment was not working effectively resulting in poor implementation of the Clinical Establishment Act, 2010. All private health institutions were running on provisional registration and the process of permanent registration was not initiated. Even provisional registration had expired for many health institutions. Shortfall was noticed in conducting inspections required under Drugs and Cosmetics Rules, 1945. There was shortfall in targets of lifting drugs and cosmetics samples, delay in lifting samples and also delay in analysis of samples. Consequently, drugs declared 'not of standard quality (NSQ)' were already issued to the patients, putting their health at risk. The new drug testing laboratory at Baddi was yet to be completed and the only drug testing laboratory in the State at Kandaghat was short-staffed. In Himachal Pradesh, some manufacturers were charging higher prices of medicines than the notified prices. NPPA had issued show cause notices to different firms for overcharging of medicines. Price approval was not being taken by manufacturers for a new drug. Blood Banks and x-ray machines were running without licenses. Health institutions had not obtained SPCB authorisation for generation of bio-medical waste.

8.8 Recommendations

Government may ensure that:

- *State Medical Council maintains the data of all registered medical practitioners in the State in electronic form.*
- *SMC develops a communication mechanism with the Government as well as private health institutions to check the existence/updation of the registration of the doctors.*
- *The process of permanent registrations of clinical establishments is initiated and regular inspections are conducted.*
- *Maximum number of drug samples are lifted and testing capacities of the laboratories are increased so that the test results are obtained within the stipulated time frame.*

- *Overpricing of drugs by the manufacturers is checked.*
- *Timely action for obtaining license from concerned authorities for running various facilities is taken.*
- *A mechanism is put in place to ensure that all Health Institutions have proper authorisation from State Pollution Control Board (SPCB) for generation, storage, treatment/disposal and handling of bio-medical waste.*

CHAPTER-IX
SPECIALISED HOSPITALS

Chapter IX: Specialised Hospitals

Specialised Hospitals are medical centres that target one area of medicine and care or a particular group of patients.

In Himachal Pradesh, there are six specialised hospitals namely Dental College, Shimla, three Leprosy Hospitals, Tuberculosis Sanatorium, Solan and Himachal Hospital of Mental Health and Rehabilitation (HHMH&R), Shimla. Five out of these six hospitals were covered in the audit. The audit was conducted to ascertain and examine the adequacy of funding, availability and management of healthcare infrastructure, availability of human resources and availability of drugs and consumables. The audit observations are detailed in succeeding paragraphs.

9.1 Dental College, Shimla

The Himachal Pradesh Government Dental College and Hospital (HPGD&H) came into existence in the year 1994 with an intake capacity of 20 students per year for the Bachelor of Dental Surgery (BDS) course. The intake capacity was increased to 60 admissions from 2007-08 onwards and to 75 from 2019-20. The Master of Dental Surgery (MDS) course in four specialties i.e. Oral Surgery, Periodontics, Orthodontics and Community Dentistry was also started from 2006-07 with intake capacity of two students each in every department. The MDS seats were increased to 19 from 2020-21 onwards.

9.1.1 Financial Management

The year-wise budget allotted and expenditure incurred by the hospital during 2016-17 to 2021-22 is shown in **Table 9.1**.

Table 9.1: Budget and expenditure summary during 2016-17 to 2021-22

(₹ in crore)

Year	Budget	Expenditure	Expenditure on Salary
2016-17	15.59	14.52	11.10
2017-18	17.87	16.17	12.60
2018-19	20.38	17.38	12.86
2019-20	23.09	19.69	14.12
2020-21	24.91	20.14	14.43
2021-22	26.32	22.47	15.00
Total	**128.16**	**110.37**	**80.11**

Source: Departmental figures.

During 2016-22, ₹ 110.37 crore was incurred from the State Budget, out of which 73 *per cent* (₹ 80.11 crore) was incurred on account of pay and allowances.

The user charges collected from the patients on account of hospital and lab charges are deposited in the account created for Rogi Kalyan Samiti (RKS). Day-to-day expenditure of the hospital is met from RKS funds. During the period 2016-22, expenditure of ₹ 13.82 crore was incurred from the fund. The following issues were noticed by Audit:

- In the Dental College, Shimla, the payment of stipend to the students was required to be made through the State treasury. It was noticed that apart from the State funds, an amount

of ₹ 34.04 lakh was paid to the students for Scholarship and Stipend from RKS fund up to March 2021[1], which was irregular.

Principal, Dental College Shimla (August 2022) in his reply stated that the amount could not be adjusted due to payment of stipend directly in beneficiary accounts as per new treasury rules.

The reply was not tenable as the stipend should not have been disbursed from the RKS funds. Further, the amount was lying unadjusted since 2018-19 and as of March 2021, there was unadjusted advance of ₹ 34.04 lakh.

- There were delays ranging between 3-25 days in depositing the user charges of ₹ 4.18 lakh in RKS account.

9.1.2 Resource Management

Review of the hospital resources such as staff availability, patient services and management of consumables and drugs revealed the following:

- **Human resources**: As of May 2022, while there was no shortfall[2] in number of doctors and specialists against the sanctioned strength, however, there was 22.22 *per cent* shortage in availability of nurses and paramedical staff.
- **Patients services**: The trend of patient influx, surgeries and X-rays conducted between 2016-17 to 2021-22 was shown in **Table 9.2**.

Table 9.2: Details of OPD and IPD load

Year	Indoor Patients	OPD Patients	No. of major surgeries	No. of minor surgeries	No. of X-rays taken
2016-17	169	63,715	102	285	32,218
2017-18	215	57,856	102	255	32,889
2018-19	197	60,854	97	893	41,173
2019-20	350	79,656	280	70	23,666
2020-21	350	18,094	75	122	10,111
2021-22	76	68,033	59	255	21,464

Source: Annual administrative reports of Dental College.

  - In the OPD ward, it was observed that adequate seating in waiting area was not available, some chairs were broken and no separate toilet facility was available for the differently abled persons.
  - Grievance redressal committee was formed only in 2021-22 and no patient satisfaction survey was conducted.
  - OPD timings were not displayed on registration counters and outside OPDs. Citizen charter was not displayed and important contact numbers (casualty medical officer, hospital manager, etc.) were not displayed in the registration area.
- **Drugs, consumables and reagent management**: Patients had to purchase medicines from the market as drugs were not kept in the store during 2016-22. Quality tests of the consumables were conducted by the head of the department and the technical committee

[1] RKS balance sheet for 2021-22 not finalised as of August 2022.

[2] Doctors and specialists: sanctioned: 62, available: 62. Nurses and paramedical staff: Sanctioned: 36, available: 28.

and not by the Drug Inspector. Physical verification of stores was carried out only during 2018-19 and 2020-21. It was further observed that:

- Consumables were out of stock for periods ranging between 5 to 1020 days during February 2017 and May 2022. The shortage impacted the various departments which was evident from the following facts:

- **Short supply:** Between January 2018 and January 2022, there was short supply of 19 items of consumables requested by eight departments during the period.
- **Non-supply:** During July 2016 to October 2021, 28 consumable items requisitioned by 9 departments of the college were not supplied due to non-availability of the items in the store.

The Department in its reply (August 2022) stated that shortage of consumables after March 2020 was due to lockdown and purchase order had been placed for shortages. Further, physical verification could not be conducted due to Covid-19.

The reply is not tenable as non-conducting of physical verification and shortage of consumables were also observed for periods prior to Covid-19 pandemic.

9.1.3 Observations from joint physical verification

During joint physical verification of the hospital premises, the following was observed:

- Fire safety certificates could not be obtained (August 2022) due to pending works (shifting of transformers) and installation of illuminated exit signs.
- There was seepage in the walls of the OPD (Oral and Maxillofacial surgery), compromising the hygiene of the hospital as shown in the following pictures.

Pictures 9.1 and **9.2:** Showing seepage in the walls.

- All the ten patients selected for beneficiary survey were satisfied with availability of water services and cleanliness of the hospital. Further, they confirmed the non-existence of complaint register in the OPD. Shortage of drugs in the hospitals was also mentioned by the patients.

9.2 Leprosy Hospitals

Leprosy, also known as Hansen's disease (HD), is a long-term infection by the bacteria Mycobacterium leprae or Mycobacterium lepromatosis. Infection can lead to damage of the nerves, respiratory tract, skin and eyes.

National Leprosy Eradication Programme (NLEP) is a Centrally Sponsored Scheme under the umbrella of National Health Mission (NHM). India has achieved the elimination of leprosy as a public health problem (defined as less than one case per 10,000 population at National level). In Himachal Pradesh, there are three Zonal Leprosy Hospitals (ZLHs), one each in Solan, Kangra and Chamba districts. ZLH Kangra and ZLH Solan were covered in audit.

9.2.1 Financial Management

The details of expenditure incurred in the two Zonal hospitals during 2016-22 are detailed in **Table 9.3**.

Table 9.3: Details of budget and expenditure by ZLH

(₹ in crore)

Year	Budget and Expenditure of ZLH Kangra			Budget and Expenditure of ZLH Solan		
	Budget	Total expenditure	Expenditure on salary	Budget	Total expenditure	Expenditure on salary (e-kosh data)
2016-17	0.91	0.72	0.67	1.80	1.44	1.14
2017-18	0.84	0.74	0.71	1.76	1.43	1.09
2018-19	0.85	0.72	0.68	1.79	1.52	0.91
2019-20	0.87	0.62	0.56	1.43	1.17	1.06
2020-21	0.89	0.75	0.66	1.55	1.29	1.16
2021-22	0.74	0.68	0.54	1.36	1.35	1.25
Total	**5.10**	**4.23**	**3.82**	**9.69**	**8.20**	**6.61**

Source: Departmental figures and E-Kosh.

During the period 2016-17 to 2021-22, against budget allocation of ₹ 5.10 crore for ZLH Kangra, the expenditure was ₹ 4.23 crore. For the same period, the budget allocated for ZLH Solan was ₹ 9.69 crore against which ₹ 8.20 crore was utilised. Thus, the ZLHs utilised 82.94 *per cent* and 84.62 *per cent* of the budget respectively.

The major component of expenditure was on salary with 90.31 *per cent* and 80.60 *per cent* in ZLH, Kangra and ZLH, Solan respectively.

9.2.2 Out-patient and In-patient service

Audit observed that 26,776 patients were treated in the OPD during 2016-22, details of which are given in **Table 9.4**.

Table 9.4: OPD strength and availability of doctor

Year	No. of OPD patients		Total	No. of Beds		No. of doctors	
	Solan	Kangra		Solan	Kangra	Solan	Kangra
2016-17	2,821	1,380	4,201	20	10	1	1
2017-18	1973	2,069	4,042	20	10	1	1
2018-19	847	3,931	4,778	20	10	1	1
2019-20	1,135	5,520	6,655	20	10	1	1
2020-21	687	2,708	3,395	20	10	1	1
2021-22	919	2,786	3,705	20	10	1	2
Total	**8,382**	**18,394**	**26,776**				

Source: Departmental figures.

In ZLH Solan, OPD patients load showed a mixed trend. The number of patients decreased from 2,821 in 2016-17 to 847 in 2018-19, increased in 2019-20 to 1,135, decreased in 2020-21 to 687 and then again increased to 919 patients in 2021-22. In ZLH, Kangra OPD patients load

was found to be on an increasing trend from 1,380 in 2016-17 to 5,520 in 2019-20 but decreased in 2020-21 to 2,708 and then again increased to 2,786 in 2021-22.

In ZLH, Kangra, though OPD patient load showed an increasing trend (except in 2020-21, during COVID-19), however there was considerable shortage (ranging between 65 to 81 *per cent*) of staff including Nurses and Paramedical staff as compared to the sanctioned strength. The position of availability of nurses, paramedical and other staff vis-à-vis sanctioned strength is shown in **Table 9.5**.

Table 9.5: Position of nurses, paramedical and other staff in ZLH Solan and ZLH Kangra

Year	ZLH Solan						ZLH Kangra					
	Nurses and Paramedical staff			Other staff			Nurses and Paramedical staff			Other staff		
	Sanctioned strength	In position	Shortage (*per cent*)	Sanctioned strength	In position	Shortage (*per cent*)	Sanctioned strength	In position	Shortage (*per cent*)	Sanctioned strength	In position	Shortage (*per cent*)
2016-17	9	6	33	12	6	50	20	4	80	21	4	81
2017-18	9	6	33	12	6	50	20	5	75	21	4	81
2018-19	9	7	22	12	6	50	20	5	75	21	5	76
2019-20	9	7	22	11	6	45	20	6	70	21	5	76
2020-21	9	6	33	12	6	50	20	6	70	21	5	76
2021-22	9	7	22	12	8	33	20	6	70	23	8	65

Source: Departmental figures.

It was further noticed that:

- IPD facility was available in both the Leprosy Hospitals.
- There were four to 19 patients[3] in IPD of Solan and Kangra districts who required care year after year.

During the Exit Conference, Secretary (Health) stated that staff has not been posted in IPD, as the patients admitted do not require care after normal working hours. The reply was not acceptable as norms for posting of Medical officers in the Leprosy Hospitals have not been fixed as intimated by the DHS and it is a fact that round-the-clock services were not provided in these hospitals.

9.2.3 Management of drugs and consumables

- In ZLH Kangra, 10 general medicines remained out of stock for durations ranging between of 57 to 778 days and three leprosy medicines for periods ranging between 17 and 96 days.
- There was non-accountal of 755 units of 11 medicines as observed during test-check in ZLH Kangra during 2016-22 with reference to medicines issued from store to OPD/IPD registers, indicating possible pilferage or irregular diversion.
- In ZLH, Kangra, out of the total amount of ₹ 17.00 lakh received (July 2016: ₹10.00 lakh, November 2016: ₹ five lakh and February 2018: ₹ two lakh) for purchase of free medicines under NHM, an amount of ₹ 4.24 lakh was still lying unutilised in the savings bank account as of March 2022.
- The medicine store at ZLH, Kangra did not have adequate space for keeping the medicines. Cartons of medicines were lying on the floor as shown in **Pictures 9.3** and **9.4**:

[3] Solan: seven to 19 and Kangra: four to 10.


Pictures 9.3 and 9.4: **Showing medicine boxes lying on the floor.**

In reply, ZLO Kangra stated (June 2022) that the matter will be taken up with the higher authority.

9.2.4 Management and availability of infrastructure

In ZLH, Solan, 19 patients were being treated at a shelter home in Mandodhar. These patients in ZLH were subsequently shifted to a building of the Community Health Centre (CHC) Dharampur in September 2014 near the National highway and the shelter home was transferred to the Education Department. With the up-gradation of the highway to four lanes, the land of the CHC along with the existing structure was transferred to NHAI and the CHC building was dismantled. ZLH along with 17 patients was shifted temporarily to Chambaghat, Solan during November 2017 with IPD and OPD wards in different buildings as a permanent ZLH was proposed to be constructed at Kumarhatti (Lohanji), whose foundation stone was laid on 20/09/2017. The structure was not completed as of February 2022 even after incurring expenditure of ₹ 3.12 crore and the patients were being treated in a temporary camp for more than five years.

In reply, ZLO Solan stated (February 2022) that the hospital was to have been inaugurated on 30 January 2022 but due to Omicron variant cases, the same was delayed. As soon as the situation stabilises, the hospital along with the patients will be shifted.


Picture 9.5: Previous leprosy centre where college is being constructed


Picture 9.6: Dismantled CHC beside the highway


Picture 9.7: New incomplete leprosy hospital at Lohanji

During physical verification of the temporary treatment camp for leprosy patients, it was seen that the ward was running in two rooms with inadequate space as evident from **Picture 9.8**. There was seepage in the walls of the ward and absence of sunlight. The toilets and bathrooms of both the wards were not properly cleaned.

		
Picture 9.8: Male IPD ward	**Picture 9.9: Common entrance for male and female ward.**	**Picture 9.10: Combined toilet and bathroom for male patients**

- During physical verification of the OPD of ZLH, Solan it was noticed that the hospital was running in two rented rooms. There was no space for storing drugs, which were kept in cupboards. There was only one common toilet, which was being used by both hospital staff and OPD patients (both male and female).

  In reply ZLO Solan (February 2022) stated that patients were kept in a small space as it was a temporary arrangement, and the walls were not renovated and microbiological sampling for surface and air was not done. It was also stated that the OPD space is very less and drugs are not stored as per the protocol as this hospital has been shifted temporarily.

- During physical verification of ZLH, Solan along with ZLH, Kangra, audit observed that doctors and staff posted in the hospital had not been allotted Government accommodation.

- In ZLH, Solan, there were two vehicles against which only one driver was posted who was deployed by District Leprosy Society under NHM and whose salary was being drawn from the establishment of NHM under CMO, Solan. ZLH, Kangra also had two vehicles which were lying idle in the campus as drivers were not posted.

Pictures 9.11 and 9.12: Ambulance and bus of the Zonal Hospital lying idle in the campus due to non-posting of drivers.

- The approach road to ZLH, Kangra required repairs for which the ZLH had requested DHS Shimla for providing funds (₹10.74 lakh) during September 2020. However, the funds were not received and maintenance of the road had not been carried out (May 2022).

9.3 Tuberculosis Sanatorium (TBS) Dharampur, Solan

The sanatorium was inaugurated by Viceroy Lord Charles Hardinge on 3rd October 1911. The sanatorium is a 100 bedded facility with five doctors and 45 operational beds as of March 2022.

9.3.1 Financial management

Year-wise allotment and expenditure of funds during 2016-22 pertaining to TBS Dharampur is shown in **Table 9.6**.

Table 9.6 Budget provisions and expenditure during 2016-22

(₹ in crore)

Year	Budget Allocation	Expenditure	Surrender (*Per cent*)
2016-17	5.61	5.27	0.34 (6.06)
2017-18	6.44	5.90	0.54 (8.38)
2018-19	6.50	5.88	0.62 (9.53)
2019-20	7.20	6.36	0.84 (11.66)
2020-21	6.77	5.85	0.92 (13.59)
2021-22	6.82	6.49	0.33 (4.84)
Total	**39.34**	**35.75**	**3.59 (9.13)**

Source: Figures supplied by Department.

The expenditure incurred on TBS Dharampur, Solan increased by 23.15 *per cent* in 2021-22 as compared to 2016-17. However, the Department surrendered 9.13 *per cent* of the budget funds during 2016-22. The unspent funds ranged between 4.84 to 13.59 *per cent* at the end of each year during the period 2016-22 as detailed in **Table 9.6**.

The SOE-wise utilisation of funds by the TBS Dharampur, Solan for 2016-22 is shown in **Table 9.7.**

Table 9.7: SOE-wise utilisation of funds

Year	Total Expenditure	Salary	Drugs and Consumables	Machinery and Equipment	Major works	Other
2016-17	5.27	4.52	0.33	0.00	0.00	0.42
2017-18	5.90	4.98	0.29	0.00	0.00	0.63
2018-19	5.88	5.06	0.34	0.00	0.00	0.48
2019-20	6.36	5.40	0.15	0.18	0.00	0.63
2020-21	5.85	5.24	0.12	0.00	0.00	0.49
2021-22	6.49	5.54	0.13	0.00	0.00	0.82
Total	**35.75**	**30.74**	**1.36**	**0.18**	**0.00**	**3.47**

Source: Figures supplied by Department.

As seen from **Table 9.7**, 85.99 *per cent* of the expenditure was incurred on salary, 3.80 *per cent* on Drugs and Consumables, 0.50 *per cent* on Machinery and Equipment, 9.71 *per cent* towards 'Others' and nil on 'Major works' during 2016-22. It is observed that expenditure under 'Salary' had increased by 22.57 *per cent* from ₹ 4.52 crore in 2016-17 to ₹ 5.54 crore in 2021-22. Despite increase in expenditure over the years, the expenditure on drugs and consumables declined by 60.60 *per cent* from ₹ 0.33 crore to ₹ 0.13 crore during the period.

9.3.2 Human Resource Management

Audit scrutiny of the resources of TBS Dharampur revealed that there was shortage in nursing, paramedical and other staff ranging from 20 to 86 *per cent* as shown in **Table 9.8**.

Table 9.8: Details of sanctioned strength for various medical cadres as on 31/03/2022

Sl. No.	Category	Sanctioned Strength	Men in position	Vacant	*Percent* of Vacancy
1.	MS	01	01	0	0
2.	MO	05	05	0	0
3.	Para Medical Staff	10	06	4	40
4.	Other Staff	07	01	6	86
5.	Ministerial Staff	05	04	1	20
6.	Nursing Staff	56	31	25	45
7.	Class IV/Driver	35	13	22	63
Total		**119**	**61**	**58**	**49**

Source: Figures supplied by Department.

The average OPD and IPD load per day showed a decreasing trend from 2018-19 to 2020-21 as shown in **Table 9.9**.

Table 9.9: Details of manpower deployed for IPD/OPD

Year	No. of sanctioned beds	No. of operational beds	Average number of patients per day in IPD as per admission register	Number of OPD patients during the year	Average OPD patients per day (no. of OPD/365)	OPD patients per day per doctor	No. of staff nurses and ward sisters
2016-17	100	67	34	9,988	27	27/2= 14	28
2017-18	100	67	30	10,203	28	28/2= 14	29
2018-19	100	67	23	10,537	29	29/4= 7	27
2019-20	100	45	15	9,522	26	26/4= 7	29
2020-21	100	45	12	4,707	13	13/4= 3	31
2021-22	100	45	12	5,104	14	14/5=3	31

Source: Departmental figures

It can be seen from **Table 9.9** that by the end of March 2022, the number of patients per day per doctor was less than five whereas the number of staff nurses and ward sisters exceeded the average number of patients (IPD+OPD) per day.

In reply, Sr. MS stated that deployment of the staff is being done by the Government. The reply of the Department should be seen in light of the fact that the number of beds for the hospital was reduced from 300 to 100 in 2006. However, no efforts were taken by the Department for restructuring the human resources as per revised bed strength since 2006.

9.4 Himachal Hospital of Mental Health and Rehabilitation, Shimla

Mental Health Act, 1987 was repealed and in its place a more comprehensive Mental Health Care Act (MHCA)-2017 came into effect in April 2017 in order to protect, promote and fulfil the rights of the persons suffering from mental illness.

9.4.1 Mental Health facilities in the State

The following mental health facilities are available in the State:

- One State level mental hospital (Himachal Hospital of Mental Hospital and Rehabilitation, Shimla) with a bed capacity of 62.
- 30 bedded Psychiatry ward in IGMC Shimla.
- 10 bedded Psychiatry ward in RPGMC, Kangra.

- Four medical colleges which have come up recently have Psychiatry department providing psychiatric and de-addiction services.
- District Hospitals constitute General Hospital Psychiatry Units (GHPU) at district level, where psychiatrist is posted and provides psychiatric and de-addiction services.
- District Mental Health Programme (DMHP) is running in all the districts in HP but because of the shortage of mental health professionals, the level of services is restricted to identifying mental illnesses and referring the patients to appropriate mental health facilities.
- At sub-district level, psychiatric service and de-addiction services are provided at 16 CHs and five CHCs.

9.4.2 Financial management

Budget allocation and expenditure for Himachal Hospital of Mental Health and Rehabilitation, Shimla is shown in **Table 9.10**.

Table 9.10: Budget provision and expenditure during 2016-22

(₹ in lakh)

Year	Budget provision	Expenditure	Surrender/Excess (*per cent*)
2016-17	210.26	195.03	-15.23 (7.24)
2017-18	215.05	229.58	+14.53 (6.76)
2018-19	418.90	393.66	-25.24 (6.03)
2019-20	322.76	305.62	-17.14 (5.31)
2020-21	375.52	355.08	-20.44 (5.44)
2021-22	425.31	402.98	-22.33 ((5.25)
Total	**1,967.80**	**1,881.95**	**-85.85 (4.36)**

Source: Figures supplied by HHMH&R, Shimla.

The expenditure incurred on Himachal Hospital of Mental Health and Rehabilitation, Shimla increased by 106.62 *per cent* in 2021-22 compared to 2016-17. However, the Department surrendered 4.36 *per cent* of the budgeted funds during 2016-22. The savings were mainly under the salary head, due to vacancies.

Table 9.11: Component wise utilisation of funds by HHMH&R, Shimla

(₹ in lakh)

Year	Total Expenditure	Salary[4]	Drugs and Consumables	Machinery and Equipment	Major works	Other
2016-17	195.03	94.36	24.07	4.91	0.00	71.69
2017-18	229.58	104.70	42.98	26.52	0.00	55.38
2018-19	393.66	160.96	54.08	4.88	100.00	73.74
2019-20	305.62	191.78	39.04	6.54	0.00	68.26
2020-21	355.08	210.57	47.23	6.24	0.00	91.04
2021-22	402.98	238.51	24.03	25.00	0.00	115.44
Total	**1,881.95**	**1,000.88**	**231.43**	**74.09**	**100.00**	**475.55**

Source: Figures supplied by HHMH&R, Shimla.

As can be seen from **Table 9.11**, 53.18 *per cent* of the expenditure was incurred on Human Resources (salary), 12.30 *per cent* on Drugs and Consumables, 3.94 *per cent* on Machinery and Equipment, 5.31 *per cent* on major works and 25.27 *per cent* towards 'Others' during 2016-22. It is observed that expenditure under 'Others' mainly comprised of Office Expenses, POL, Motor Vehicles etc., which had increased from ₹ 71.69 lakh to ₹ 115.44 lakh during 2016-22.

[4] Salary = Salary + GIA Salary + expenditure on outsourced staff.

In reply (March 2023) Sr. Medical Superintendent stated that the enhancement in expenditure in various heads is because of increased demand and improved services and increased price index of various articles and consumables.

9.4.3 Human Resources

Himachal Hospital of Mental Health and Rehabilitation (HHMH&R), being the only specialised mental healthcare hospital in the State, the need for adequate specialists and staff in the hospital was crucial. There were 62 beds in HHMH&R Shimla with 12 beds earmarked specially for rehabilitation of admitted patients. The position of available specialists/staff *vis-à-vis* sanctioned strength is given in **Table 9.12**.

Table 9.12: Persons in-position against sanctioned strength

Post	Psychiatrist		Medical Officers		Clinical Psychologist		Staff Nurses		Others	
Year	SS	Available	SS	Available	SS	Available	SS	Available	SS	Available
2016-17	1	1	1	1	1	0	4	6	18	16
2017-18	1	1	1	1	1	0	4	6	18	16
2018-19	2	1	5	5	1	0	4	6	19	17
2019-20	2	1	5	5	1	0	4	6	27	25
2020-21	2	1	5	5	1	0	4	6	27	25
2021-22	2	1	5	4	1	0	4	6	27	20

Source: Figures supplied by HHMH&R, Shimla.

- Against two sanctioned posts of Psychiatrist, only one was in position during 2018-19 to 2021-22, except during the period from 02/05/2020 to 17/01/2021, when no one was posted. The post of Psychiatrist was again lying vacant from 16/03/2022 to May 2023. Against five posts of MOs, only four MOs were available till the date of audit (May 2022).
- The posts of Clinical Psychologist/Psychiatric Social Worker / Gate keeper were not filled up in the hospital ever since the sanctioning of these posts. Non-posting of Psychiatrist, Clinical Psychologist, Psychiatric Social Worker and Registered Psychiatrist Nurse resulted in denial of basic Mental Health services to IPD and OPD patients. Total number of IPD and OPD patients during 2016-22 were 701 and 10,755 respectively.
- Six staff nurses were posted against the sanctioned four posts during 2016-22. Similarly, against four sanctioned posts of class IV employees, six[5] persons were posted.
- GoHP, during February 2013, shifted the post of Dental Medical Officer, PHC Tapri (Kinnaur) to HHMH&R, Shimla. The posting of Dental Medical Officer was not justified as it is a specialised hospital to cater to mental health and rehabilitation aspects.
- Further 20,800 mental health medicines which were likely to expire in November 2020 were sent to other District hospitals, and medical colleges in September 2020 due to non-posting of a psychiatrist in the hospital.

In reply to the audit observations, Sr. MS stated that the psychiatric services were being provided by the visiting psychiatrist from IGMC Shimla. The class IV personnel were engaged on outsourced basis and deputation basis.

[5] Four class IV engaged on outsourced basis by NHM and two class IV working on deputation basis.

HHMH&R being the only specialised hospital in the State to cater to mental health and rehabilitation, the Government should ensure that personnel against the sanctioned posts are available to ensure timely and better treatment of mental health related illnesses.

9.4.4 Management of drugs and consumables

9.4.4.1 Non-availability of essential drugs/medicines/consumables

Scrutiny of records revealed that medicines for treatment of patients were not available in the hospital for further distribution to the wards and OPD. The year-wise details of essential items as per EDL and those which were not available are given in **Table 9.13**.

Table 9.13: Details of essential items which were not available

Year	Medicine required as per EDL (Essential drug list)	Actual no. of essential medicines available	Shortage
2016-17	29	14	15
2017-18	29	11	18
2018-19	29	11	18
2019-20	28	10	18
2020-21	43	21	22
2021-22	43	27	16

Source: Figures supplied by HHMH&R, Shimla.

Thus, all the essential items as per norms were not available in HHMH&R, Shimla during 2016-22.

While replying to the audit observation, Sr. MS stated that all the psychotropic medicines were not required to be purchased, but drugs in each category should be available in the hospital stores for free distribution to patients. Medicines prescribed to patients while receiving treatment from IGMC/DDU/ KNH were purchased without any consideration of medicine being in EDL or not.

Though it was stated that drugs in each category should be available in the hospital, it was noticed that there was shortage ranging from 15 to 22 types of drugs during 2016-22.

9.4.4.2 Variation in DVDMS[6] and stock register data

To ascertain the correctness of data/information available in DVDMS, Audit examined the stock of 10 medicines shown in the DVDMS data and stock register of the medicines. It was observed that the stock shown in DVDMS varied from the actual stock recorded in the stock register. The details of variation in the stock of test-checked medicines as of May 2022 are given in **Table 9.14**.

[6] DVDMS (Drugs and Vaccine Distribution Management System) is a software platform to automate various activities of Directorate General Medical Health, Government of Himachal Pradesh. It comprises Drug and Vaccine Supply Chain Management that deals with Purchase Order, Inventory Management and Distribution of various drugs, etc.

Table 9.14: Variation in DVDMS and stock register

Sl. No.	Drug name	Quantity shown in DVDMS	Quantity shown in stock register	Variation (-/+)
1.	Aceclofenac tablet 100mg	2,500	1,100	-1,400
2.	Calcium carbonate tablet 500 mg elemental calcium + vitamin D3 250 I.U	5,000	2,680	-2,320
3.	Clonazepam tablet 0.5 mg	60,000	45,900	-14,100
4.	Escitalopram tablet 10mg	30,000	23,800	-6,200
5.	Fluoxetine capsule 20mg	20,000	17,500	-2,500
6	Haloperidol tablet 5mg	1,10,200	1,02,200	-8,000
7	Risperidone tablet 2mg	1,00,000	73,170	-26,830
8	Trihexyphenidyl hydrochloride tablet 2mg	40,000	19,400	-20,600
9.	Escitalopram tablet 10 mg	9,500	23,800	+14,300
10.	Imipramine tablet 25 mg	7,000	6,500	-500

Source: DVDMS portal and Departmental figures.

On the differences pointed out, the Sr. MS stated that the discrepancy is due to issuance of medicines which were not reflected in DVDMS, as the pharmacist is not computer literate.

The reply is not acceptable as the data in the DVDMS portal would not reflect the correct position of availability of drugs in the store.

Other drug management related findings

- On scrutiny of DVDMS report, it was noticed that the supplier did not supply medicines amounting to ₹ 5.91 lakh to the hospital during 2021-22. However, no action was taken against the firm for levy of penalty as mentioned in the supply order.
- On scrutiny of HPDVDMS report, it was noticed that during 2018-19 to 2021-22, the supplier had not supplied the drugs within the permissible time (45 days, 60 days for injectables) and there were delays ranging from 48 to 77 days. No records of penalty imposed on the supplier were found.

In reply, the Department stated that there are identified source of suppliers of psychotropic medicines and accordingly medicines are procured from them despite delay in supply. It was also mentioned that since the medicines are supplied free of cost, therefore penalty provisions are not enforced.

The reply is not tenable as delay in supply leads to non-availability of medicines for patients of mental illness.

- No quality checks of the drugs procured through local purchase was carried out. It was stated that due to urgent need for purchase, quality tests were not done.

  The reply should be viewed in light of the fact that on the one hand the hospital is not penalising the supplier for delayed supply, while on the other hand quality tests were not carried out due to urgency.

- There were no inspections conducted by the Drug Controller/Inspectors and drugs were not taken for testing during the period of audit.

9.4.5 Infrastructure Management

9.4.5.1 Blocking of funds of ₹212.50 lakh due to incomplete works

GoHP had approved an amount of ₹ 634.36 lakh for the construction of residential accommodation for doctors and paramedical staff quarters at HHMH&R, Shimla in June 2018.

An amount of ₹ 212.50 lakh was deposited with the executing agency (HPPWD) during 2018-19 to 2021-22. The work was awarded to the contractor during February 2020 by HPPWD with the time limit of 18 months for completion of the work. It was observed that the works of residential accommodation were still incomplete as of May 2023.

		
Picture 9.13: Type IV Quarters	**Picture 9.14 : Type III quarters**	**Picture 9.15 : Type II quarters**

While replying to the audit observation, the Sr. MS stated that commencement of the work was delayed because of forest clearance required and NGT restriction on multi-storeyed structures. The project was also hindered by the COVID-19 pandemic.

Thus, due to non-monitoring of the execution of the works, the construction of residential quarters remained incomplete, resulting in blocking of funds of ₹212.50 lakh as well as non-provision of residential accommodation to the doctors and paramedical staff.

9.4.5.2 Non-availability of Ambulance services

HHMH&R had no ambulance service prior to January 2021, when Himachal Pradesh State Red Cross Society, Shimla donated one ambulance to the hospital. To take the IPD patients for check-ups to other health institutions, the hospital had to hire private ambulances.

Picture 9.16: Idle ambulance at HHMH&R, Shimla.

Sr. Medical Superintendent had sent the requirement/permission in January 2021 to fill up the post of driver to the Director of Health Services. However, it was observed that the post of

driver was vacant, resulting in the ambulance remaining unutilised and the hospital had to hire private ambulances.

While confirming the facts, the Sr. MS stated that the matter for posting a driver on regular basis had been taken up with the Director Health services.

9.4.5.3 Inadequate action in implementation of Mental Health Care Act, 2017 and Mental Healthcare (State Mental Health Authority) Rules, 2018

Himachal Pradesh State Mental Health Authority (HPSMHA) headed by Additional Chief Secretary/Principal Secretary (Health), was reconstituted under Section 45 of MHCA, 2017 in November 2018. Medical Superintendent of HHMH&R, Shimla was nominated as CEO of HPSMHA under Section 52(1). Six Mental Health Review boards have been constituted (April 2019) in the State of Himachal Pradesh under Section 73 (1). Further, under section 77 (1), any person with mental illness or his nominated representative or a representative of a registered non-governmental organisation, with the consent of such a person, being aggrieved by the decision of any of the mental health establishments or whose rights under this Act have been violated, may make an application to the Board seeking redressal or appropriate relief.

Table 9.15: Status of action to be taken under Act/Rules

Sl. No.	Section No.	Action to be taken under provisions of Act and Rule	Reply of Chief Executive Officer of HP State Mental Health Authority
Mental Healthcare Act, 2017			
1.	31	The Government shall take measures to address the human resource requirements of mental health services in the country by planning, developing and implementing educational and training programmes	One day training of Medical officer on Mental Health was conducted.
2.	55d	The State Authority shall register clinical psychologists, mental health nurses and psychiatric social workers in the State to work as mental health professionals and publish the list of such registered mental health professionals.	Enrolment of the mental health professionals is being done.
3.	63	The SMHA to maintain the accounts and prepare annual accounts and audit of accounts to be conducted by the Comptroller and Auditor General of India.	Could not be undertaken because of the COVID pandemic.
Mental Healthcare (State Mental Health Authority) Rules, 2018			
4.	15	The annual statement of accounts should be submitted for audit before 30th June by the SMHA.	Could not be done because of the COVID pandemic.
5.	17	The SMHA must conduct audit of registered mental health establishments (MHE) in the State.	No audit has been conducted.

As can be seen from **Table 9.15**:

- Only one one-day training of Medical officers on Mental Health was conducted (October 2020) after November 2018.
- Enrolment of the mental health professionals was not done. Neither were the accounts of SMHA maintained nor has audit been conducted so far.
- SMHA had not conducted audit of the registered mental health establishments in the State to ensure that such mental health establishments comply with the minimum standard specified.

In reply, Chief Executive Officer of HP State Mental Health Authority stated that maintenance of the accounts of SMHA and audit could not be conducted due to the COVID pandemic. The reply was not acceptable as SMHA was formed during November 2018 but no activities under the Act were carried out except conducting of one one-day training.

9.4.6 Findings related to Auxiliary Services

The following deficiencies were observed in the auxiliary services of the hospital:

- **Dietary services**: Patient-specific diet such as diabetic, semi solid and liquid was not provided. Food was not distributed in covered trolleys and patients were served on the floor and through open containers.

Picture 9.17: Food being served on the floor

Picture 9.18: Food was served in open container

- **Laundry services:** Bed linen was changed twice a week and not on a daily basis. Biological indicators were not used to prevent toxicity of insecticides. Laundry area was in an open space and washed linen was found stored on the floor.

Picture 9.19: Laundry in open area

Picture 9.20: Cleaned linen stored on the floor.

- **Bio medical waste:** Liquid waste was allowed to flow into drains without its treatment. Training for management of bio-medical waste was given to 24 persons only in 2019-20.
- **Patient safety**: No SOP was being followed for ensuring patient safety. Disaster Management Committee and Disaster Management plans were not formulated. There was no signage for emergency exit. Training programmes for fire prevention, handling and transfer of occupants to a place of safety were not conducted. Most importantly, No Objection Certificate was not obtained from Fire Department.

Picture 9.21: **Incomplete Fire Hydrant at HHMH&R Shimla**

- **Other miscellaneous findings**:
  - Biological testing of water and cleaning of water tanks was not done during 2016-21.
  - Psychiatric OPD was not available during May 2020 to Jan 2021 and March 2022 to May 2023 due to non-availability of specialist.
  - Grievance redressal committee did not exist during the period 2016-21.
  - No patient satisfaction survey was conducted during 2016-21.
  - No SOPs were available for infection control. Hospital infection control committee (HICC) was not formed.
  - Seven OPD patients were surveyed by Audit. All of them were satisfied with the services of the hospital. However, they put across their grievances regarding non-availability of public transport as the hospital is 1 km away from NH-7. The patients also suggested that drinking water facility should be provided at the gate itself.

9.5 Conclusion

In Dental College. Shimla, apart from the State treasury, stipends were also paid from RKS funds. Essential drugs were not kept in stores and shortage of consumables was observed. In the Leprosy hospitals, there was shortage of staff. In ZLH, Solan the infrastructure was inadequate as the hospital was running in rented premises without adequate space for proper storage of drugs. For the tuberculosis sanatorium, the sanctioned strength of personnel was not reviewed after revision of number of beds.

There was shortage of doctors in HHMH&R and all types of essential drugs were not available in the hospital. There was variation in data of DVDMS and hospital registers. No Objection Certificate (NOC) from the fire department was not obtained for the hospital.

9.6 Recommendations

The State Government may:

- *Review the requirement and availability of various personnel in the hospitals and fill up the vacant posts,*
- *Ensure availability of essential drugs and adequate infrastructure in the hospitals.*
- *Ensure correct information is uploaded in the DVDM system and suppliers adhere to the timelines for delivery of orders.*

CHAPTER-X
SUSTAINABLE DEVELOPMENT GOALS - 3

Chapter X: Sustainable Development Goals-3

The Sustainable Development Goals (SDGs) evolved from the Millennium Development Goals (MDGs). The MDGs were a set of eight international development goals with 18 quantifiable targets for the year 2015 set by the Millennium Summit of the United Nations in 2000. MDGs were the first global attempt at establishing measurable goals and targets on key challenges facing the world within a single framework and galvanised countries and communities into action.

The Sustainable Development Goals 2030 Agenda was adopted by the United Nations General Assembly in September 2015 to set out a vision for a world free of poverty, hunger, disease and want and came into effect from 1st January 2016, to be achieved by 2030. There are 17 SDGs (SDG-1 to SDG-17) and 169 targets for sustainable development. India is committed to 2030 Agenda and SDGs were to be taken as the key contours of envisioning development up to the local level.

SDG - 3 seeks to ensure health and well-being for all, at every stage of life. The goal addresses all major health priorities, including reproductive, maternal and child health; communicable, non-communicable and environmental diseases; universal health coverage; and access to safe, effective, quality and affordable medicines and vaccines.

In India, National Institution for Transforming India (NITI) Aayog is responsible for overall coordination of the SDGs and the Ministry of Statistics and Programme Implementation (MoSPI) is responsible for the formulation of the National Indicator Framework (NIF) to monitor the SDGs.

'Drishti Himachal Pradesh-2030 was launched (March 2019) by the State Government to achieve Sustainable Development Goals. In light of the Agenda for Sustainable Development-2030, which aims at leaving no one behind in sharing the benefits of development, the State Government had been pursuing inclusive growth with the motto of "Sabka Saath-Sabka Vikas".

The State Government was committed to attain synergy between faster and inclusive economic growth, social cohesion and environmental sustainability in Himachal Pradesh to facilitate overall prosperity and a better quality of life for the people of the State by building partnerships with the private sector, civil society institutions, knowledge communities, panchayats, local bodies, domain experts and citizens of the State.

State Health & Family Welfare Department was nominated as the nodal department for planning, preparation of a road map, implementation and monitoring of SDG-3, Good Health and Well-Being, which calls on countries to ensure healthy lives and promote well-being for all at all ages.

10.1 Formulation of State Indicator Framework and District Indicator Framework

To monitor and measure the progress of SDGs, State Governments were to formulate State Indicator Framework (SIF) and District Indicator Framework (DIF) in consultation with National Institution for Transforming India (NITI) Aayog. The State Governments have been

given flexibility to develop their own indicators taking into consideration local priorities to monitor SDGs and National Indicator Framework (NIF) will serve as a basis. A brief description of the 13 global targets under SDG-3 is given in **Table 10.1**.

Table 10.1: Details of global targets

Target No.	Brief description
3.1	By 2030, reduce the maternal mortality ratio (MMR)[1] to less than 70 per 1,00,000 live births.
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.
3.4	To reduce the premature mortality due to NCDs (Non communicable disease) by 1/3rd by 2030 (to decrease prevalence of NCDs and to increase treatment compliance. To promote Mental Health and well-being).
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
3.6	By 2020, halve the number of deaths and injuries from road traffic accidents
3.7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.
3.8	Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemical and air, water and soil pollution and contamination.
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.
3.b	To support the research and development of vaccines and medicines for the communicable and non-communicable diseases.
3.c	Substantially increases health financing and the recruitment, development, training and retention of the health workforce (Health+ Ayurveda).
3.d	Strengthen the capacity for early warning, risk reduction and of local, national and global health risks.

A comparative analysis (**Appendix 12**) of indicators for the 13 global targets was done by Audit to assess availability of indicators for SDG-3 by scrutinising Global Indicator Framework, National Indicator Framework (NIF), and State Indicator Framework (SIF). Scrutiny of records/reports revealed:

1. There are 28 Global Indicators and 41 National Indicators covering all 13 Global targets under SDG -3. In Himachal Pradesh as per 'Drishti Himachal Pradesh-2030', there are 28 State indicators which covers all 13 global targets.
2. District Indicator Framework has not been prepared as of October 2022.
3. The State Government adopted the SDG- 3 goals after a delay of nearly two and a half years from the date of adoption of national indicators. This shows that the Government of Himachal Pradesh had not taken timely action to adopt the national indicators.

[1] MMR in Himachal Pradesh could not be calculated due to less than one lakh births per year, hence, maternal deaths have been reflected in absolute number.

10.2 Planning for SDG-3

State Health and Family Welfare Department was nominated as the nodal department for planning, preparation of a road map, implementation and monitoring of SDG-3.

The nodal department was required to prepare a road map, three-year and seven-year action plan, ensure implementation, assessment, review and hold regular review meetings with other departments concerned to achieve the targets under SDG- 3.

Audit observed the following:

- The nodal department had prepared a road map, three-year and seven-year action plan in December 2016.
- The Department had not held regular review meetings with other departments for monitoring the progress of the indicators with reference to the action plan prepared.
- Workshops/seminars or training programmes for skill development of the staff were not organised regularly.

10.3 Constitution of Working group

The Government of Himachal Pradesh (Planning Department) issued instructions in July 2016 for constitution of a working group by the nodal department with other related major departments for preparing vision/strategy/action documents in pursuit of achieving Sustainable Development Goals-3. The working group was constituted by the Health Department, however, only one meeting of the group was held during July 2016 and thereafter no meetings were held till October 2022.

10.4 Allocation of funds under NHM in order to achieve SDG-3 Goals

The Ministry of Health and Family Welfare, GoI intimated that NHM is the primary vehicle for achieving SDG- 3 targets. Various schemes and programmes are implemented under NHM in the State. All the NHM schemes impact the indicators and targets, therefore the funds released under NHM play an important role towards improvement of health and well-being in the State. No separate funds were allocated specifically for SDG-3.

The budget projection and allocation for NHM during 2016-17 to 2021-22 is depicted in **Table 10.2**:

Table 10.2: Budget allocation under NHM

(₹ in crore)

Year	Amount projected	Amount approved in Programme Implementation Plan	Allocation	Shortfall (-)/Excess (+)	
				Amount	Percentage
2016-17	365.74	335.56	230.23	-105.33	-31.38
2017-18	444.27	409.82	373.34	-36.48	-8.90
2018-19	478.46	431.72	374.31	-57.41	-13.29
2019-20	587.1	517.31	556.96	39.65	7.66
2020-21	674.68	624.33	563.43	-60.9	-9.75
2021-22	655.23	627.00	980.72	353.72	56.41
Total	**3,205.48**	**2,945.74**	**3,079.07**	**133.33**	**4.53**

Source: Data provided by NHM.

As seen from **Table 10.2**, there was a shortfall in allocation of funds in comparison to approved funds ranging from 8.90 *per cent* to 31.38 *per cent* during 2016-19 and 9.75 *per cent* in 2020-21. There was an excess of 7.66 *per cent* and 56.41 *per cent* during 2019-20 and 2021-22 respectively. There was an overall excess of 4.53 *per cent* of the allocation of funds during 2016-22. The Department replied (January 2024) that the excess allocation during 2021-22 was on account of allocation towards Infrastructure Maintenance & ECRP I & II for Emergency Response during the Covid pandemic.

10.5 Targets for Health Indicators under Sustainable Development Goals (SDGs-3)

Sustainable Development Goals on healthcare are focused on providing essential services to the entire population, with a special emphasis on the poor and vulnerable groups. The comparison of important health indicators of NFHS-4 vis-à-vis NFHS-5 are given in **Appendix 13**. Targets for 10 healthcare indicators[2] for Himachal Pradesh, which were to be achieved by 2022 are given in **Table 10.3**.

Table 10.3: Important health indicators and SDG-3 targets thereof

Sl. No.	Name of Indicators	SDG/ Drishti Target for 2022	Achievements for 2022 (May 2022)	Remarks	Target for 2030
1	Maternal Mortality Ratio	<45/1,00,000 live births	MMR not calculated, however, 71 maternal deaths against 89,963 live births in 2020-21 as per HMIS data	Not achieved	<25/ 1,00,000 live births
2	Institutional deliveries (ID)	90 *per cent*	92.68* *per cent*	Achieved	100 *per cent*
3	Mortality rate under 5 years	30/1,000	23	Achieved	<5/1,000
4	Neonatal mortality rate (NMR)	15/1,000	13	Achieved	5-10/1,000
5	Infant Mortality rate	22/1,000	19	Achieved	5-10/1,000
6	TB	<100 / lakh	<20 /lakh	Achieved	20/lakh
7	Percentage of women aged 15-49 years with a live birth in a given time period	Achieving 100 *per cent* ANC	4 ANCs- 80.30 *per cent***	Not on track to achieve 100 *per cent* ANC as per SDG-3	100 *per cent* by 2022

[2] As per Drishti Himachal Pradesh-2030.

Sl. No.	Name of Indicators	SDG/ Drishti Target for 2022	Achievements for 2022 (May 2022)	Remarks	Target for 2030
	who received all antenatal care (ANC)				
8	Age standardised prevalence of current tobacco use among persons aged 15+ years (Prevalence of tobacco use aged 15 yrs. and older: India-38 *per cent*, Himachal Pradesh-22 *per cent*)	Bring down tobacco use among persons aged 15 years and older from current level (22 *per cent*) to 17 *per cent*	12 *per cent*	Achieved	Bring down tobacco use among aged 15 years and older to<5 *per cent*
9	No. of beneficiaries covered (H.P. SDMA, Clean energy, Hospital manual, Public awareness, Risk reduction, yoga, training of health professionals and others)	To covers all sub- divisions/ blocks teams for awareness/ training/ sensitisation	Only notification for financial incentive to yoga teachers for conducting yoga services at HWCs. In selected Districts, it was noticed that no yoga services were provided in HWCs.	Not on track to achieve target as per State target.	To cover all villages in the State for awareness/training/ sensitisation by 2024. To cover all schools up to 10+2 level for awareness/ training/ sensitisation
10	Death rate due to road traffic injuries (1000 deaths per year / approximately 3-4 deaths per day)	To ensure dedicated Trauma Care services up to CHC level and quality services in all centres	Dedicated Trauma Centres have not yet been established in the whole State (Trauma Centre at Nalagarh, Kotkhai, Una-funds received)	Not on track to achieve target as per State target.	To ensure dedicated Trauma Care services up to PHC level by 2024, and quality services in all health facilities

Source: Data provided by Mission Director, NHM HP

** Calculated against total number of deliveries in the State.*

*** As per HMIS portal, four ANCs were done for 85,395 against 1,06,340 registered pregnant women.*

Note: For the remaining 18 indicators, Department stated that assessment is yet to be done by GoI/Govt of HP and that SDG-3 indicators are being reviewed periodically.

From the **Table 10.3**, it is evident that in view of the present achievement, the State needs to gear up and review the activities to achieve the target for 2030 of a few indicators as discussed below:

- Target for institutional deliveries in 2022 was 90 *per cent* and 100 *per cent* by 2030. The State achievement was 92.68 *per cent* as of March 2022.
- Target for 2022 for NMR was 15/1,000 and the State's achievement was 13/1,000 during 2019-20. The State needs to gear up to achieve the target for 2030.
- Target for 2022 for IMR for 2022 was 22/1,000. The State achievement was 19/1,000 as of May 2022.
- Target for 2022 for giving all four ANC was 100 *per cent* but as on March 2022, the State achievement was 80.30 *per cent*.
- Target for 2022 was to cover all subdivisions/blocks teams for awareness/training/ sensitisation/yoga but as of September 2021, the Government had notified to only provide financial incentives to yoga teachers in Health Wellness Centres (HWCs). No data for awareness/training/ sensitisation was provided by the Department. Further, in the selected districts, it was noticed that no yoga services were provided in HWCs.
- To reduce the death rate due to road traffic injuries, the State had targeted to ensure dedicated trauma care services up to CHC level and quality services in all centres by 2022. But as of June 2022, no dedicated Trauma Centres have been established in the whole State. Trauma centre at Nalagarh, Kotkhai and Una are yet to be set up though funds have been received.

10.6 Conclusion

The State adopted 28 indicators covering all 13 global targets. The district indicator framework was not prepared as of October 2022. The State adopted SDG-3 goals after a delay of two and a half years from the date of adoption of national indicators. Separate budget provision for implementation of SDG-3 was not allocated, instead NHM was considered to be the primary vehicle for achieving SDG-3 targets. However, in between 2016-17 to 2018-19 there were shortfalls ranging between 8.90 *per cent* to 31.38 *per cent* and 9.75 *per cent* in 2020-21 in allocation of funds from NHM. The target for maternal mortality ratio could not be achieved as of May 2022. Workshops/seminars and training programmes for skill development of the staff were not organised.

10.7 Recommendations

There needs to be convergence of all the various State agencies involved in implementation of different aspects of SDG-3. Accordingly, the Government should endeavour to:

- *Conduct timely meetings of the working group of SDG-3 so that views and suggestions of the members of the working group can be discussed and implemented.*
- *Prepare District Indicator Framework to enable monitoring the progress of the district towards achieving SDG targets.*
- *Organise regular workshops/seminars and training programmes for skill development of the staff organised for effective implementation of the SDG targets.*
- *Make available sufficient funds from NHM to meet the SDG target timely.*

(CHANDA MADHUKAR PANDIT)
Principal Accountant General (Audit),
Himachal Pradesh

Shimla
Dated: 13 September 2024

Countersigned

(GIRISH CHANDRA MURMU)
Comptroller and Auditor General of India

New Delhi
Dated: 20 September 2024

APPENDICES

Appendices

Appendix-1

(Refer paragraph 3.1.1.6)

Average consultation time in CH, CHCs and PHCs

Name of hospital	Year	OPDs during the year	No. of doctors/ consultants	*Average consultation time (in minutes)
CH Chango	2016-17	4,540	1	23.79
	2017-18	4,237	1	25.49
	2018-19	5,621	1	19.21
	2019-20	7,137	1	15.13
	2020-21	6,027	1	17.92
	2021-22	5,414	1	20
CH Kandaghat	2016-17	26,043	3	12.44
	2017-18	32,360	3	10.01
	2018-19	28,745	4	15.03
	2019-20	29,532	4	14.63
	2020-21	13,561	4	31.86
	2021-22	32,524	7	23.24
CH Thural	2016-17	64,708	2	3.34
	2017-18	68,336	2	3.16
	2018-19	77,929	9	12.47
	2019-20	96,660	7	7.82
	2020-21	49,524	10	21.81
	2021-22	52,269	14	28.93
CH Jawalamukhi	2016-17	1,15,311	3	2.81
	2017-18	1,01,133	8	8.54
	2018-19	1,08,938	8	7.93
	2019-20	1,32,726	10	8.14
	2020-21	1,03,516	10	10.43
	2021-22	90,858	12	14.26
CH Baijnath	2016-17	68,943	8	12.53
	2017-18	68,693	8	12.58
	2018-19	74,519	8	11.59
	2019-20	86,269	12	15.02
	2020-21	54,183	12	23.92
	2021-22	70,437	15	23
CH Shahpur	2016-17	1,04,254	2	2.07
	2017-18	1,12,513	4	3.84
	2018-19	1,35,705	4	3.18
	2019-20	1,29,013	12	10.05
	2020-21	83,929	12	15.44
	2021-22	1,02,415	14	14.76
CHC Sangla	2016-17	14,552	2	14.84
	2017-18	16,185	2	13.35
	2018-19	13,799	2	15.65
	2019-20	13,776	3	23.52
	2020-21	9,551	3	33.92
	2021-22	8,674	5	62.26
CHC Pooh	2016-17	6,430	2	33.59
	2017-18	6,982	3	46.41
	2018-19	7,150	3	45.31
	2019-20	8,003	3	40.48
	2020-21	6,248	5	86.43
	2021-22	6,560	4	65.85

Name of hospital	Year	OPDs during the year	No. of doctors/ consultants	*Average consultation time (in minutes)
CHC Syri	2016-17	16,574	2	13.03
	2017-18	14,643	1	7.38
	2018-19	18,364	2	11.76
	2019-20	19,423	2	11.12
	2020-21	11,431	2	18.90
	2021-22	10,417	5	51.84
CHC Dharampur	2016-17	49,988	1	2.16
	2017-18	53,004	1	2.04
	2018-19	47,453	1	2.28
	2019-20	47,249	1	2.29
	2020-21	26,832	2	8.05
	2021-22	33,161	3	9.77
CHC Bachhwai	2016-17	7,363	1	14.67
	2017-18	8,406	1	12.85
	2018-19	8,607	1	12.55
	2019-20	8,622	1	12.53
	2020-21	6,225	3	52.05
	2021-22	8,310	3	38.99
CHC Majheen	2016-17	12,514	1	8.63
	2017-18	8,981	2	24.05
	2018-19	5,301	1	20.37
	2019-20	6,429	2	33.60
	2020-21	5,337	2	40.47
	2021-22	6,862	2	31.48
CHC Bir	2016-17	25,126	2	8.60
	2017-18	34,406	2	6.28
	2018-19	27,729	2	7.79
	2019-20	27,611	2	7.82
	2020-21	15,622	2	13.83
	2021-22	9,132	2	23.65

***** *Average consultation time= Working minutes (taken as 360 minutes (6 hour))/ (No. of patients/ (300 days* no. of doctors))*

Appendix-2

(Refer paragraph 3.1.1.10)

Non-availability of OPD services in Civil hospital as of March 2023

Name of OPD services	Chango*	Kandaghat*	Thural	Shahpur*	Baijnath	Jawalamukhi
ENT	×	×	✓	×	✓	×
General Medicine	×	×	✓	×	✓	✓
Eye	×	×	✓	✓	✓	×
Paediatric	×	✓	×	✓	✓	×
General Surgical	×	×	✓	✓	✓	×
Dental	×	✓	✓	✓	✓	✓
Obstetrics and Gynaecology	×	×	✓	✓	✓	✓
Orthopaedic	×	×	×	×	×	×
Neonatology	×	×	×	×	×	×
Social service	×	×	✓	×	✓	✓
General	✓	✓	✓	✓	✓	✓

Non-availability of OPD services in CHC as on March 2023

Name of OPD services	Pooh	Sangla	Syri	Dharampur	Majheen	Bachhwai	Bir
General	✓*	✓*	✓*	✓*	✓*	✓*	✓
General Medicine	×	×	×	×	×	×	×
Paediatric	×	×	×	×	×	×	×
General Surgery	×	×	×	×	×	×	×
Dental	×	✓	✓	✓	×	×	✓
Obstetric and gynaecology	×	×	×	×	×	×	×

** Although HIs replied that they have General Medicine OPD available however per Health directory (issued by DHS) as of March 2023 no specific specialist was posted instead a Medical officer was reported to be available accordingly only general OPD was taken as available.*

Appendix-3

(Refer paragraph 4.7.1)

Details of medicines not issued from stock registers

(Quantity in numbers)

Name of health institute	Number of medicines checked	Quantity demanded	Quantity issued	Quantity not issued	Remarks
Short Supply of medicines					
CMO Kangra	24	1,75,640	66,990	1,08,650	Less issue from CMO (District Store) store to BMO/ CH /CHC /PHC
CMO Solan	10	16,44,000	6,08,100	10,35,900	Less issue from CMO (District Store) store to BMO/ CH /CHC /PHC
CMO Kinnaur	10	1,03,000	20,700	82,300	Less issue from CMO to CHC / PHC
Sub-total	**44**	**19,22,640**	**6,95,790**	**12,26,850**	
DH, Kangra	10	3,580	898	2,682	Less issue from DH store to the various wards of hospitals.
Sub-total	**10**	**3,580**	898	**2,682**	
BMO Thural	31	53,712	16,466	37,246	Less issue from BMO Medicines store to CH, PHC, HSCs
BMO Jawalamukhi	26	39,404	200	39,204	Less issue to CHC, PHC from BMO Medicines store
CH, Shahpur	9	2,054	672	1382	Less issue to IPD/OPD of the hospital
CH, Jawalamukhi	4	1,000	600	400	Less issue from CH store to OPD
Sub-total	**70**	**96,170**	**17,938**	**78,232**	
Non-supply despite availability					
CMO Kangra	1	50000	0	50,000	Non-issue to BMO Mahakal though 5.90 lakhs quantity available in store
CMO Kinnaur	2	3,000	0	3,000	Available 6500 medicines, not issued to PHC Kalpa and CHC Pooh
Sub-total	**3**	**53,000**	**0**	**53,000**	
BMO Thural	17	4,797	0	4,797	Non-issue to CH/CHC/PHC/ HSC despite availability of 1.36 lakh quantity of medicines in store on that date.
CH, Shahpur	1	200	0	200	Non-issue to Emergency of CH despite availability of 0.34 lakh quantity of medicines in store on that date.
Sub-total	**18**	**4,997**	**0**	**4,997**	
Non-supply due to non-availability					
CMO, Kangra	20	2,45,300	0	2,45,300	Non-issue to PHC/CHC
BMO, Thural	10	2,331	0	2,331	Non-issue to CH/CHC and PHC
BMO, Jawalamukhi	13	10,250	0	10,250	Non-issue to CHC and PHC
CH, Shahpur	32	6,530	0	6,530	Non-issue to IPD and OPD
CH, Jawalamukhi	40	18,078	0	18,078	Non-issue to IPD and OPD
Sub-total	**115**	**2,82,489**	**0**	**2,82,489**	

Appendix-4

(Refer paragraph 4.7.2)

Details of medicines not accounted in stock registers

(Quantity in numbers)

Name of health institute	Number of medicines checked	Quantity issued	Quantity accounted for in stock register	Quantity not accounted for	Remarks
CH, Thural	6	830	0	830	Not recorded in OPD/IPD stock register
CH, Shahpur	3	252	46	206	Not recorded in the stock register of Labour Room
CH, Baijnath	6	9,900	9,700	200	Not recorded in OPD and IPD stock register
CH, Jawalamukhi	5	580	0	580	Not recorded in IPD stock register
CHC Majheen	4	4,710	0	4,710	Not recorded in the OPD stock register
CHC, Bachhwai	10	2,150	600	1,550	Issued to OPD from CHC medicine store
PHC, Jagroopnagar	15	11,250	0	11,250	Not recorded in IPD stock register
PHC, Bheri	13	2,720	0	2,720	Not recorded in OPD stock register
PHC, Ghallour	9	658	0	658	Not recorded in OPD stock register
PHC, Chari	3	2,050	49	2,001	Not recorded in the OPD stock register
PHC, Darini	2	1,030	0	1,030	Not recorded in the OPD stock register
PHC, Seon	3	540	0	540	Not recorded in the OPD stock register
PHC, Bandian Khopa	7	2,435	0	2,435	Not recorded in the OPD stock register
HSC, Tara	7	707	0	707	Not recorded in the OPD stock register
HSC, Ghirtholi	4	562	56	506	Not recorded in the OPD stock register
HSC, Bahi	7	2,063	0	2,063	Not recorded in the OPD stock register
Total	**104**	**42,437**	**10,451**	**31,986**	

Appendix-5

(Refer paragraph 5.1.3)

Constituency-wise availability of HIs in selected districts as of March 2022

Kangra District					
Constituency	**No. of CH**	**No. of CHC**	**No. of PHC**	**No. of HSC**	**Total**
Dharamshala	0	0	6	23	**29**
Kangra	1	1	4	22	**28**
Shahpur	1	1	5	29	36
Nagrota	1	1	5	33	40
Palampur	2	1	4	27	34
Baijnath	2	1	10	37	**50**
Sullah	1	3	6	36	**46**
Jaisingpur	1	2	11	32	**46**
Dehra	1	1	6	32	40
Jawalamukhi	2	1	6	28	37
Jaswan-Pragpur	2	3	2	34	41
Nurpur	1	1	9	19	30
Indora	2	0	3	24	**29**
Jawali	1	2	5	34	42
Fatehpur	2	1	4	30	37
Total	**20**	**19**	**86**	**440**	**565**

Kinnaur District					
Constituency	**No. of CH**	**No. of CHC**	**No. of PHC**	**No. of HSC**	**Total**
Kinnaur	2	3	23	35	63

Solan District					
Constituency	**No. of CH**	**No. of CHC**	**No. of PHC**	**No. of HSC**	**Total**
Solan	2	1	6	33	42
Arki	2	1	14	41	58
Doon	0	2	6	30	38
Kasauli	0	2	5	27	34
Nalagarh	1	2	8	44	55
Total	**5**	**8**	**39**	**175**	**227**

Source: As per directory of Health Department, Government of Himachal Pradesh.

Each district has one District Hospital at Dharamshala (Kangra), Kinnaur and Solan.

Appendix-6

(Refer paragraph 5.1.4.1 to 5.1.4.3)

Available Accommodation in selected HIs as on 31/03/2023

Sl. No.	Name of HIs	Sanctioned Doctor	Accommodation available	Sanctioned Nurses and Paramedical staff	Accommodation available
District Hospital					
1	DH Kinnaur	21	12	57	8
2	DH Solan	32	8	78	12
3	DH Kangra	44	12	101	18
	Total	**97**	**32**	**236**	**38**
Civil Hospital					
1	CH Chango	2	0	6	2
2	CH Kandaghat	7	2	20	0
3	CH Thural	15	2	30	4
4	CH Shahpur	16	2	36	4
5	CH Jawalamukhi	16	4	39	4
6	CH Baijnath	15	2	38	2
	Total	**71**	**12**	**169**	**16**
Community Health Center					
1	CHC Pooh	9	2	15	6
2	CHC Sangla	6	5	13	6
3	CHC Syri	6	2	9	4
4	CHC Dharampur	4	0	11	0
5	CHC Majheen	2	0	3	0
6	CHC Bachhwai	4	0	9	0
7	CHC Bir	3	0	4	0
Total		**34**	**9**	**64**	**16**

Appendix-7

(Refer paragraph 5.2.2 to 5.2.4)

Functional beds against sanctioned beds in DHs and selected CHs & CHCs as on 31 March 2022

District	Name of Health Institution	Total sanctioned beds	Total functional beds	*Per cent* shortfall of beds
District Hospital				
Bilaspur	DH, Bilaspur	300	300	0
Chamba	DH, Chamba	500	325	35
Hamirpur	DH, Hamirpur	550	310	44
Kangra	DH, Kangra at Dharmshala	300	275	8
Kinnaur	DH, Kinnaur at Reckong-peo	125	109	13
Kullu	DH, Kullu	300	300	0
L& S	DH, L& S at Keylong	70	20	71
Mandi	DH, Mandi	300	300	0
Shimla	DH, Shimla	300	257	14
Solan	DH, Solan	200	180	10
Sirmaur	DH, Sirmaur at Nahan	430	297	31
Una	DH, Una	300	200	33
Civil hospital				
Kinnaur	CH Chango	10	6	40
Solan	CH Kandaghat	50	15	70
Kangra	CH Thural	100	35	65
	CH Shahpur	100	30	70
	CH Baijnath	100	60	40
	CH Jawalamukhi	100	40	60
Community Health Centre				
Kinnaur	CHC Pooh	20	6	70
	CHC Sangla	20	20	0
Solan	CHC Dharampur	50	6	88
	CHC Syri	6	27	-
Kangra	CHC Majheen	30	7	77
	CHC Bachhwai	0	0	0
	CHC Bir	6	6	0

Appendix-8

(Refer paragraph 5.4.2)

Status of water availability in the selected HIs as on date of audit

Name of hospital	Functional bed strength	Quantity of water required per day (@450 litres per day per bed for DH/CH & minimum 10000 litres for CHC)	Capacity of the tanks available (litre)	Remarks
DH Kinnaur	109	49,050	50,000	Capacity of tanks is as per norms
DH Solan	180	81,000	50,000	Capacity of tanks insufficient.
DH Kangra*	225	1,01,250	80,000	Capacity of tanks insufficient
CH Chango	6	2,700	1000	Capacity of tanks insufficient
CH Kandaghat*	20	9,000	10000	Capacity of tanks is as per norms
CH Thural	35	15,750	20000	Capacity of tanks is as per norms
CH Jawalamukhi	40	18,000	10000	Capacity of tanks insufficient
CH Shahpur	30	13,500	5000	Capacity of tanks insufficient
CH Baijnath	60	27,000	11000	Capacity of tanks insufficient
CHC Pooh	6	10,000	4000	Capacity of tanks insufficient
CHC Sangla	20	10,000	3000	Capacity of tanks insufficient
CHC Syri*	6	10,000	40000	Capacity of tanks is as per norms
CHC Dharampur	6	10,000	8000	Capacity of tanks insufficient
CHC Bachhwai	0	10,000	250	Capacity of tanks insufficient
CHC Majheen	7	10,000	2000	Capacity of tanks insufficient
CHC Bir	6	10,000	20000	Capacity of tanks is as per norms

** Functional beds strength considered as on date of audit, for CHC Syri sanctioned strength considered as actual beds reported were more than sanctioned*

Appendix-9

(Refer paragraph 8.4.9)

Statement showing the overcharged amount charged by the manufacturing firm against notified charge

(in ₹)

Sl. No.	Name of the Firm	Name of Formulation	Period	Quantity & sales	MRP of Company (per pack)	Notified MRP incl. of excise duty & local taxes (per pack)	Over-charge per pack	Overcharged amount
1	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Pioglar 30 tablet containing Pioglitazone 30mg	07/2014 to 10/2016	4,06,651	130	68.8	61.2	**2,48,87,041**
2	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Storvas 20 tablet (Atorvastatin 20mg)	07/2014 to 04/2015	18,14,221	197	139.5	57.5	**10,43,17,708**
3	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Storvas 20 tablet 15 Tablet of Strips	03/2015 to 03/2016	16,02,283	295.5	209.25	86.25	**13,81,96,909**
			04/2016 to 10/2016	10,71,278	295.5	194.36	101.14	**10,83,49,057**
4	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Rosuvas 20 Tablet (Rosuvas 20 mg)	07/2014 to 02/2015	14,66,734	265.4	231.7	33.7	**4,94,28,936**
			03/2015 to 10/2016	45,98,926	289.5	231.7	57.8	**26,58,17,923**
5	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Pioglar 15 tablet containing pioglitazone 15 mg	07/2014 to 10/2016	11,73,001	83.5	41.1	42.4	**4,97,35,242**
6	M/s Solrex Pharmaceutical Ltd, Baddi, Solan	Rosuvas 20 Tablet X 15's	07/2014 to 09/2016	81,78,519	221	173.7	47.3	**38,68,43,949**
7	M/s Medwor Pharma, Baddi, Solan	Mecosia Plus	01/2010 to 12/2010	10,259	84.62	13.28	71.34	**7,31,877**
8	M/s Abbott Healthcare Pvt. Ltd.	Neo Mercazole tablet uncoated 10mgX100	06/2013 to 08/2013	1,48,166	345.4	343	2.4	**3,55,598**
Total								**1,12,86,64,240**

Appendix-10

(Refer paragraph 8.4.9)

Statement showing the overcharge amount charged by the manufacturing firm against notified charge (for which quantity was not available)

(in ₹)

Sl. No.	Name of the Firm	Name of Product	MRP of Company (per pack)	Notified MRP incl. of excise duty & local taxes (per pack)	Overcharged Price (per pack)
1	E.G. Pharma, Solan HP	CEFZONE-ICX-0015 (01 GM Injection Pack)	58.16	47.95	10.21
2	Wochhardt Ltd HP	AZIWOK- 250 TAB (06 Tab's Blister Pack)	71.38	54.36	17.02
3	Cipla Ltd., Solan HP	AZIMAX- 250 TAB (06 Tab's Blister Pack)	71.23	54.36	16.87
4	Samarth Life Sciences P Ltd, HP	VANTOX -CP injection (01 GM Vial Pack)	505.15	423.38	81.77
5	Astam Healthcare P ltd., HP	FLUCAN-200 TAB (01 Tab's Blister Pack)	27.94	17.43	10.51
6	Laborate Pharma India Ltd, Sahib, HP	CEFTROX INJ. (01 GM injection Pack))	64.25	47.95	16.3
7	Scott-Edill Pharma Ltd, HP	ZITHROLECT500 TAB (03 Tab's Blister Pack)	69.36	53.49	15.87
8	Cipla Ltd, HP	AZEE-500 tab (03 Tab's Blister Pack)	69.26	53.49	15.77
9	Scott-Edill Advanced Research Labo. & Education Ltd., HP	C-ONE 1000 TAB (01 GM injection Pack))	62.48	47.95	14.53
10	Pinnacle Life Sciences Pvt. Ltd., HP	AZIDUS-500 TAB (03 Tab's Blister Pack)	69.31	53.49	15.82
11	Cipla Ltd, HP	OKACET TAB (10 Tab's Blister Pack)	20.33	15.30	5.03
12	Samarth Life Sciences P Ltd, HP	MUCOMIX INJ (2ml Ampoule Pack)	50.46	41.58	8.88
13	Prosperity 6 Pharma, Solan, HP	XONECEFF IG INJ (01 GM Vial Pack)	61.50	47.95	13.55
14	Tablets (India) Ltd., HP	TILSIGMIN TAB (10 Tab's Blister Pack)	52.05	43.20	8.85
15	Laborate Pharma. India Ltd., Sahib, HP	CIPDEC 250 TAB (10 Tab's Blister Pack)	34.50	16.20	18.30
16	Zee Labo Ltd, Sahib, HP	VEMOX-250 CAP (10 Cap's Blister Pack)	32.30	20.50	11.80

Sl. No.	Name of the Firm	Name of Product	MRP of Company (per pack)	Notified MRP incl. of excise duty & local taxes (per pack)	Overcharged Price (per pack)
17	Pinnacle Life Sciences P Ltd, HP	AZIMED -500 TAB (03Tab's Blister Pack)	69.31	53.49	15.82
18	E.G Pharma., HP	CEFTRICON-1000INJ (01 GM Vial Pack)	64.20	47.95	16.25
19	Zee Labo Ltd, Sahib, HP	SETIMED TAB (10 Tab's Blister Pack)	21.20	15.30	5.90
20	Zee Labo Ltd., Sahib HP	FLUXIZOL-150 TAB (01 Tab's Blister Pack)	16.35	10.99	5.36
21	Nitin Life sciences Ltd. HP	STECORTO-100 INJ. (100mg Vial Pack)	42.96	34.63	8.33
22	Torque Pharma, P. Ltd., HP	CETRAMC TAB (10 Tab's Blister Pack)	20	15.30	4.70
23	Laborate Pharma India Ltd., HP	CIPDEC-250 TAB (10 Tab's Blister Pack)	23.80	16.20	7.60
24	Abbott India Ltd., HP	BRUFEN 400 TAB (15 Tab's Blister Pack)	11.32	9.75	1.57

Appendix-11

(Refer paragraph 8.4.10)

Statement of launch of drug without obtaining prior price approval from NPPA

Sl. No.	Name of the manufacturing firm	Name of the drug	Date of Letter from NPPA to SDC	Remark
1	M/s Polestar Power Industries, Baddi, HP	Largeclave - Duo oral suspension 30ml (Amoxicillin) 400mg + clavulanic acid 57mg per 5 ml	24/06/2021	Launch of drug without obtaining prior price approval from NPPA
2	M/s Associated Biotech, Solan, HP	Claverel DS Duo oral suspension 30ml (Amoxicillin 400mg + clavulanic acid 57mg per 5 ml)	07/07/2021	Launch of drug without obtaining prior price approval from NPPA
3	M/s Magbro Healthcare, Solan, HP	Triderm Lotion	31/03/2021	Launch of drug without obtaining prior price approval from NPPA
4	M/s Quixotic healthcare, Solan, HP	Ofcol-DE/E Drops	20/02/2017	Launch of drug without obtaining prior price approval from NPPA
5	M/s Wockhardt Ltd, Solan, HP	Aziwok-250 Tab	13/09/2017	Launch of drug without obtaining prior price approval from NPPA
6	M/s Visa Drug & Pharmaceutical Pvt Ltd, Baddi, HP	Conzone 1g Inj	13/09/2017	Launch of drug without obtaining prior price approval from NPPA
7	M/s E.G Pharmaceuticals, Solan, HP	Ciprolac-D eye/ear drop	21/01/2016	Launch of drug without obtaining prior price approval from NPPA

Appendix-12

(Refer paragraph 10.1)

Statement of Indicators ensuring achievement of Sustainable Development Goals-3
(Ensure healthy lives and promote well-being for all at all ages)

Targets		Indicators						
Global Target No.	Targets of SDG-3	Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications		National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021	Indicators adopted in India SDG Index 20-21	Indicators adopted by Himachal Pradesh	Target by 2022	Target by 2030
		Tier	Indicators					
3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	I	3.1.1 Maternal mortality ratio	1. Maternal Mortality Ratio	Adopted	1. Maternal Mortality Rate	To reduce maternal deaths in the absolute numbers <45	To reduce maternal deaths in the absolute numbers to 25
		I	3.1.2 Proportion of births attended by skilled health personnel	2. Percentage of births attended by skilled health personnel. (Period 5 years)		2. Percentage of births attended by skilled health personnel. (Period 5 years)	Ensure 90 *per cent* births attended by SBA or institutional deliveries	100 *per cent* institutional delivery
				3. Percentage of births attended by skilled health personnel. (Period 1 year)				
				4. Percentage of women aged 15–49 years with a live birth, for last birth, who received antenatal care, four times or more. (Period 5 years/1 year)		3. Percentage of women aged 15–49 years with a live birth, for last birth, who received antenatal care, four times or more. (Period 5 years/1 year)		
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal	I	3.2.1 Under-5 mortality rate	1. Under-five mortality rate	Adopted	4. Under 5 mortality rate per 1000 live births	Reduction in Under 5 Mortality from 42 to 30	Reduction in Under 5 Mortality to <10
		I	3.2.2 Neonatal mortality rate	2. Neonatal mortality rate		5.Neonatal mortality rate	• Reduction in Neonatal Mortality rate from 25 to 15	Reduction in Neonatal Mortality rate down to 5-10

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
	mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births						• Reduction in infant mortality rate from 22 to 28	• Reduction in infant mortality rate from 5 to 10
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	I	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	1. Number of new HIV infections per 1,000 uninfected population	Adopted	6. HIV Incidence per 1000 uninfected population	90 *per cent* coverage of ART	100 *per cent* coverage of ART
							Zero transmission of HIV from mother to child	Zero transmission of HIV from mother to child
							Sustain the HIV prevention activities	Sustain the HIV prevention activities
		I	3.3.2 Tuberculosis incidence per 100,000 population	2. Tuberculosis incidence per 100,000 population	Adopted	7. Total case notification of Tuberculosis per 1 lakh population	Reduce TB incidence <100/lakh	Reduce TB incidence <20/lakh
		I	3.3.3 Malaria incidence per 1,000 population	3. Malaria incidence per 1,000 population		8.Malaria incidence per 1,000 population	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
		I	3.3.4 Hepatitis B incidence per 100,000 population	4. Prevalence of Hepatitis "B" per 100,000 population		9. Prevalence of Hepatitis "B" per 100,000 population	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
		I	3.3.5 Number of people requiring interventions against neglected tropical diseases					

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
				5. Dengue: Case Fatality Ratio (CFR)		10. Dengue: Case Fatality Ratio (CFR)	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
				6.The proportion of grade-2 cases amongst new cases of Leprosy		11. The proportion of grade-2 cases amongst new cases of Leprosy	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
				7. Percentage of blocks reporting < 1 Kala Azar case per 10,000 population out of the total endemic blocks		12. Percentage of blocks reporting < 1 Kala Azar case per 10,000 population out of the total endemic blocks	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
				8. Percentage of districts reporting < 1 *per cent* Microfilaria rate (MF) out of Targeted Endemic districts		13. Percentage of districts reporting <1 *per cent* Microfilaria rate (MF) out of Targeted Endemic districts	Sustain the effort and ensure zero transmission of API	Sustain the effort and ensure zero transmission of API
3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	I	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	1. Number of deaths due to cancer		14. Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	• Implementation of the compressive NCDs prevention programme in the State as per GoI guidelines. • To reduce the prevalence of NCD risk factors by one third	• To reduce the prevalence of NCD risk factors by one third • To achieve the proportional reduction in NCDs mortality by one third.
		I	3.4.2 Suicide mortality rate	2. Suicide mortality rate	Adopted	15. Suicide Rate (per 100,000 population	No Target	No Target

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	II	3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	1. Number of persons treated in de-addiction centres		16. Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	Ensure deaddiction facility up to CHCs and PHCs levels and to ensure quality of services at all level	To ensure awareness/ enforced of the existing regulations • To access the impact of the innovations. • Operationalization of the road map with the Excise, Police Department and NGOs to minimise the use of harmful alcohol
		I	3.5.2 Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	2. Percentage of population (men15-49 years) & women (15-49 years) who drink alcohol about once a week out of total population (men15-49 years) & women (15-49 years) who drink alcohol. 3. Percentage of population (men (15-54 years) and women (15-49 years)) who consume alcohol		17. Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	-Do-	-Do-
3.6	By 2020, halve the number of global deaths and injuries from road traffic accidents	I	3.6.1 Death rate due to road traffic injuries	1. People killed / injured in road accidents.	Adopted	18. Death Rate Due to Road Traffic Accidents (per 1,00,000 population	To ensure dedicated Trauma care services up to CHC level and quality services in all centres	To ensure dedicated Trauma care services up to PHCs level by 2024, and quality services in all health facilities

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
3.7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	I	3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	1. Percentage of currently married women (15-49 years) who have their need for family planning satisfied with modern methods.		19. Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	• Reduction in unmet need by 10 *per cent*, • To ensure the 3 years difference between birth of two children (to reduce sibling rivalry) • To strengthening the existing ARSH clinic	• Reduction in unmet need to <5 *per cent* by 2025 • To expand the ARSH clinic to all PHCs level by 2024 • To ensure the optimum utilisation of the clinics with quality services
				2. Percentage of currently married women (15-49 years) who use any modern family planning methods				
		I	3.7.2 Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	3. Percentage of women aged 15-19 years who were already mothers or pregnant.		20. Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	Achieving 100 *per cent* immunization sustain the same	
				4.Adolescent birth rate (aged 15-19) per 1000 women in that age group	Adopted	21. Percentage of institutional deliveries out of total deliveries reported		
				5. Percentage of Institutional Births. (5 years/1 years)				
3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care	I	3.8.1 Coverage of essential health services	Not adopted			17. Percentage of household availed treatment under Ayushman Bharat (Universal Health Coverage)	

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
	services and access to safe, effective, quality and affordable essential medicines and vaccines for all							
		I	3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income	1. Proportion of population with large household expenditure on health as a share of total household expenditure or income.	Monthly per capita out-of-pocket expenditure on health as a share of Monthly Per capita Consumption Expenditure (MPCE)		• 100 *per cent* immunization and the same will be retained. • 100 *per cent* coverage of entire population under Health Insurance scheme and the same will be sustained. • Population based screening, including cervical cancer, of all NCDs	To achieve 100 *per cent* protection against catastrophic expenditure on Health
				2. Percentage of currently married women (15-49 years) who use any modern family planning methods.		22. Percentage of currently married women (15-49 years) who use any modern family planning methods.		
				3. Percentage of people living with HIV currently receiving ART among the detected number of adults and children living with HIV				
				4. Prevalence of hypertension among men and women age 15-49 years 2015-16 (in percentage).				

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
				5. Percentage of population in age group 15-49 who reported sought treatment out of total population in that age group having diabetes.				
				6. Percentage of women aged 15-49 who have ever under gone Cervix examination.				
				7. Percentage of TB cases successfully treated (cured plus treatment completed) 21 among TB cases notified to the national health authorities during a specified period				
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	I	3.9.1 Mortality rate attributed to household and ambient air pollution	Mortality rate attributed in household and ambient air pollution		23. Households using polluting fuel/ non-polluting fuels for cooking	There is not specific data of deaths and illness from hazardous chemical and air, water and soil pollution and contamination, therefor target cannot be fixed. The State may plan to conduct a survey/ study to retrieve the data to fix the target accordingly	
		I	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and	Mortality due to unsafe water, unsafe sanitation and lack of hygiene		24. Households having access to potable drinking water		

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
			Hygiene for All (WASH) services)					
		I	3.9.3 Mortality rate attributed to unintentional poisoning	1. Mortality rate attributed to unintentional poisoning				
				2. Proportion of men and women reporting Asthma 15-49 years				
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	I	3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	1. Percentage of adults 15 years and above with use of any kind of tobacco (smoking and smokeless)		25. Percentage of adults 15 years and above with use of any kind of tobacco (smoking and smokeless)	Bring down tobacco use among aged 15 yrs. and older from current level (22 *per cent*) to 17 *per cent*	Bring down tobacco use among aged 15 yrs. and older to<5 *per cent*
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and	I	3.b.1 Proportion of the target population covered by all vaccines included in their national programme	1. Proportion of the target population covered by all vaccines included in their national programme		26. Proportion of the target population covered by all vaccines included in their national programme	Sustainable Development Goal 3 indicator will be reviewed periodically	Sustainable Development Goal 3 indicator will be reviewed periodically

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
	Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all							
		I	3.b.2 Total net official development assistance to medical research and basic health sectors	1. Budgetary allocation for department of Health Research				
		II	3.b.3 Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis	Not adopted				
3.c	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing	I	3.c.1 Health worker density and distribution	1. Total physicians, nurses and midwives per 10000 population	Adopted	27. Total physicians, nurses and midwives per 10,000 population	The skills of manpower will be enhanced as per the emerging needs.	
				2. Percentage of government spending in health sector to DGP.				

Targets		Indicators						
Global Target No.	**Targets of SDG-3**	**Global Indicators Framework for SDG of the 2030 Agenda and their Tier-wise classifications**		**National Indicators Framework (Version-3.0) developed by MOSPI as of 31/03/2021**	**Indicators adopted in India SDG Index 20-21**	**Indicators adopted by Himachal Pradesh**	**Target by 2022**	**Target by 2030**
		Tier	**Indicators**					
	countries, especially in least developed countries and small island developing States							
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	I	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness		28. No of beneficiaries covered. HP SDMA, Clean energy, Hospital manual, Public awareness, risk reduction, YOGA, training of health	To covers all sub divisions/ blocks teams for the awareness/training/ sensitisation	To cover all villages in the state for the awareness/ training/ sensitisation by 2024, • To cover all schools up to 10+2 level for the awareness/ training/ sensitisation
		II	3.d.2 Percentage of bloodstream infections due to selected antimicrobial-resistant organisms	Not adopted				
Total	**13**	**Tier I-25 Tier II-3**	**28**	**41**	**9 + 1* different from NIF@**	**28**		

@ NIF: National Indicators Framework developed by Ministry of Statistical Programme Implementation (MOSPI), GOI.

Source: Global Indicators Framework, National Indicators Framework (Version-3.0), India SDG Index 20-21, Drishti Himachal/ Information supplied by HP NHM.

Appendix-13

(Refer paragraph 10.5)

Important health indicator as per NFHS-4 and NFHS-5

Indicator	NFHS- 4 (2015-16)			NFHS- 5 (2019-21)			NFHS- 4 (2015-16)			NFHS- 5 (2019-20)		
	India						Himachal Pradesh					
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Mothers whose last birth was protected against neonatal tetanus[1] (*per cent*)	89.9	88.6	89.0	92.7	91.7	92.0	83.1	86.5	86.2	86.7	90.5	90.0
Mothers who consumed iron folic acid for 100 days or more when they were pregnant (*per cent*)	40.8	25.9	30.3	54.0	40.2	44.1	54.0	49.0	49.4	72.9	66.4	67.2
Mothers who consumed iron folic acid for 180 days or more when they were pregnant (*per cent*)	NA	NA	NA	34.4	22.7	26.0	NA	NA	NA	44.4	42.8	43.0
Registered pregnancies for which the mother received a Mother and Child Protection (MCP) card (*per cent*)	87.7	90.0	89.3	94.9	96.3	95.9	97.0	95.2	95.4	97.8	98.8	98.7
Mothers who received postnatal care from a doctor /nurse/ LHV/ ANM/ midwife/ other health personnel within 2 days of delivery (*per cent*)	71.7	58.5	62.4	84.6	74.4	78.0	83.8	69.0	70.2	88.8	86.0	86.3
Children born at home who were taken to a health facility for a check-up within 24 hours of birth (*per cent*)	3.2	2.4	2.5	3.8	4.3	4.2	NA	1.6	1.5	NA	8.2	7.6
Children who received postnatal care from a doctor/ nurse/ LHV/ ANM/ midwife/ other health personnel within 2 days of delivery (*per cent*)	27.2	23.0	24.3	85.7	76.5	79.1	36.0	28.4	29.0	89.5	85.5	86.0
Institutional births in public facility (*per cent*)	46.2	54.4	52.1	52.6	65.3	61.9	69.3	61.0	61.6	64.2	72.7	71.7
Home births that were conducted by skilled health personnel (*per cent*)	3.0	4.9	4.3	2.1	3.7	3.2	0.4	3.6	3.4	0.8	1.8	1.7
Births attended by skilled health personnel[2] (*per cent*)	90.0	78.0	81.4	94.0	87.8	89.4	90.6	77.9	78.9	90.3	86.6	87.1

[1] Includes mothers with two injections during the pregnancy for their last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

[2] Doctor/nurse/Lady Health Visitor/Auxiliary Nurse Midwifery/midwife/other health personnel.

Indicator	NFHS- 4 (2015-16)			NFHS- 5 (2019-21)			NFHS- 4 (2015-16)			NFHS- 5 (2019-20)		
	India						Himachal Pradesh					
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Births in a private health facility that were delivered by caesarean section (*per cent*)	44.8	37.7	40.9	49.3	46.0	47.4	53.4	43.3	44.4	46.7	52.6	51.4
Births in a public health facility that were delivered by caesarean section (*per cent*)	19.9	9.3	11.9	22.7	11.9	14.3	26.3	15.5	16.4	19.8	17.2	17.4
Children age 6-59 months who are anaemic (<11.0g/dl) (*per cent*)	56.0	59.5	58.6	64.2	68.3	67.1	58.7	53.3	53.7	58.2	55.0	55.4
Men who have comprehensive knowledge[3] of HIV/ AIDS (*per cent*)	37.8	29.2	32.5	37.5	27.1	30.7	44.7	44.5	44.5	46.9	39.8	40.8

- *The per cent* of Institutional births in public facility and Births attended by skilled health personnel were increased at national level and in Himachal Pradesh. The increasing trend was in Rural area and decreasing trend in Urban area.
- *The percentage* of home births that were conducted by skilled health personnel in the State decreased from 3.4 to 1.7. In Rural areas the decrease was 50 *per cent* between the two surveys.
- *The percentage* of Births in a private health facility that were delivered by caesarean section increased from 40.9 (NFHS-4) to 47.4 (NFHS-5) at national level and in Himachal Pradesh increased from 44.4 to 51.4. There was increase caesarean births at private health facilities in Rural area from 43.3 to 52.6 in the State, while in Urban areas it decreased from 53.4 to 46.7 *per cent*.
- *The percentage* of Births in a public health facility that were delivered by caesarean section increased from 11.9 (NFHS-4) to 14.3 (NFHS-5) at national level and increased from 16.4 to 17.4 at State level. The increase in Rural area was from 15.5 to 17.2 and decrease in urban area was from 26.3 to 19.8 in Himachal Pradesh.
- Though the *percentage* of anaemic children aged 6-59 months for the State was less than that of at national level, still there was an increase from 53.7 to 55.4 *per cent*. The increase in Rural area was 53.3 to 55.0 but there was decrease in Urban areas from 58.7 to 58.2 *per cent*.

  The percentage of men having knowledge of HIV/AIDS decreased from 32.5 (NFHS-4) to 30.7 *per cent* (NFHS-5) at national level and decreased from 44.5 to 40.8 *per cent* in the State. There decrease in percentage of awareness in rural areas from 44.5 to 39.8, however, for urban areas there was an increase from 44.7 to 46.9 *per cent*.

[3] Comprehensive knowledge means knowing that consistent use of condoms every time they have sex and having just one uninfected faithful sex partner can reduce the chance of getting HIV/AIDS, knowing that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS.

https://cag.gov.in/ag/himachal-pradesh